

<223> Clone ID: LIB190-070-Q1-E1-C10

<400> 3501

acatcagtgt tcgacttggc ggaagaagta ttgcacagtg aacaaacgtt tatgagagag 60
tgtatcactt gtttaggtca gggtaccgtt gtatgttcac cttgtgtatgg cacgggtata 120
ttacaacaga acgaaacgga agagctttgt tgttattgtt tgggtagaaa aatatcttt 180
tgtgcagact gtcaggaaaa agggttggtc aaaacagagt tttaagggtt tttaaaaagg 240
agaataacaa tcctttgga atcggtaaac aatcgaaaac tcacaagtga cttttattac 300
aagggtttcc attccttgtc agaaaagtat ttgttaagttt tttgagggtta gcatcgattg 360
gcttcataag atgccatcat ttcagaattt tt 392

<210> 3502

<211> 380

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-C12

<400> 3502

actcctatat tagcttagtgc ttatacgcatt atagctaccg ataataatgct cgatgaacct 60
gatcgtttga atgttcctgc aataagaata ggaaaggcctg tgcatataca tcgcgattta 120
tggaaatatt ctttggactc tattttggaa agagatgagc gagtcgtaga gaagagaacc 180
aatttttaaga aagcagcaga aagacttgcg caaccgatgc gaggaaaagc aattggattta 240
gctcatcgag actattccaa atcacttggt caactagaac aagttagaaat gaatgttaacc 300
aaagagatac tcgagaaaata tccttattgtt ttgagttactt gtgttggagc tggtaagaaa 360
tgtataaaaga atatttcgtt 380

<210> 3503

<211> 389

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-070-Q1-E1-C3

<400> 3503

cttcggccaa gccttcggcc aagccttcgg ccaagccttc gcaatgaagg aaattaattg 60

gttacaaaag gaattaacgg aaaaacctt aacctgttc caattgatca tggtttatac 120
ttaccagaca aatttcaaag ctatccttgg cctgtttgga tggactggcc tcaggtaaag 180
gaccgggtt gcgaagatgt anagagatat gcagaaacgc tagacngtga aatggacgct 240
cgtctgatct tggacgaaac agatggcaga ctgtcaaaga atagcttaag aaatttgcgc 300
ataatgactg cgcttcttca gagagccatg gagaagaacc ttactctgta taaaatccgt 360
tcccttgtat atgtccgcca tcccgacac 389

<210> 3504
<211> 367
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-070-Q1-E1-C4

<400> 3504
aaggaaagg aaaggagaga aagaagaaag ggaataaatg caaagatctc caaagaaaaag 60
gaagaaagaa aagaaaggaa gacacaatta atgaaggcaa aaagcataag gagttgaaac 120
ggtaagaaa cccgttagtc caagcagtta aagaaagaat gagtaagaaa aaaaggagtc 180
attccaccaa gggagtana ggcgcaagaa agaaaaaccaa aacaattgaa cggaatcgga 240
aaaagggtg gatcacgtaa attaatccga taaaccgaga accttacctc tccaagaagg 300
tgttgcacgg ctgtcgaaag aacgtgctgt gaagtgagag aacgtacgag aaagcaagt 360
aggaaaa 367

<210> 3505
<211> 378
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-C5

<400> 3505
agcagcacta ggaatacggag agataataat aataatagcg atcatagcaa tgaatgccaa 60
caagtagttt taagtatatt acacaatgta ctgcagcaat tatcgtccag tctacctacg 120
agactacctt tgtatgattt gtggatggaa tggaatatt tttgcaagga aagaatgcaa 180

caaatacaac ttggcagagt aagagagacc gatcgctata tacgtgaaca acgagttgtg 240
caagtattga gaagaattca aggagaagag gatgaagtaa ctatcgatga aatagaaata 300
gcagccaaga cagttgctcg tactatggat tattccgatt cttaatggtc cgatcatgga 360
aataagaaga atagatca 378

<210> 3506
<211> 283
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-070-Q1-E1-C8
<400> 3506

cggggttgtt ttcttgtag cagttgtaca ttcaggatca tcaaattgcca tacggatgaa 60
agagagattc ttcatggaaa gaagccacat gtaaacctgc agcagcacat gctacatcga 120
cgacagaaaa gtctggtccg gaagccaagt tgaagggAAC tggtgcatacg aaacagtaac 180
aagttgacta tgcatgtgca gtcctgttat gttttgtgag ttctgtttga tagttccag 240
ctattctttt ggttagtgaat aaagagaaaa tttttataaa aat 283

<210> 3507
<211> 306
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-070-Q1-E1-D1
<400> 3507

atatctatgt acataaataa cttgtgtata cattagcttG aaacctggca aagttagtagt 60
tgttttgcAA ggtaaatatg ccggtagaaa ggcgggtgatc gtccaaaact acgacagtgg 120
aacgcaagaa cgaccctatg gccactgtgt gattgcaggc atcgacaaat atcctcgtaa 180
agtgacccga aaaatgagtG agaaaaaggt gaagaggcgt tccaaagtcc gagcgttttt 240
gcgcgtcgTC aactacaAGC atattatGCC cacgcgatAT acgttggact tggccgatgc 300
actgaa 306

<210> 3508
<211> 367
<212> DNA

<213> Cyanidium caldarium
<223> Clone ID: LIB190-070-Q1-E1-D12
<400> 3508

aaccaagcgt ctgcgaataa tgagatattt tggatgtatt tattggcctg catcgaaaaaa 60
gaaaatggca aatggatat tgcgttgcg ttggcagaaa tggcaagaga tgaatgcatt 120
cgtatgcatt tggagtcgag tgcttttg atccaacttc atctcctcat gacgaatatt 180
tatatgaagc tgagtgcgtt cgacgaggca tatactctc ttatgaatgt tgccggatgt 240
atagaatcga gcaatgttgg ttatgatttgc tccttggta tcgagtttgg tgccttgg 300
ggaacgatca tgcaatggag atggatgaa acattggcac aacaatgctt ggatagttt 360
367
agaagaaa

<210> 3509
<211> 293
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-070-Q1-E1-D3
<400> 3509

ccctgcctcc ggaattaaaa agggcaatcc cctttggtttgaacaaaaaa ccctaattccg 60
ggtacctgaa gccttaaacg taatggtcaa ccttgaaccc aaaccggtgg aaggtgattt 120
gaacggcctt ggttgtcaaa caaaacttttc aacaaagccg atgaaaaagg atggcggtt 180
caagaagtaa attttgcag tggatggaaaa gttaaaggca aaacataagg aacacatcat 240
tgcatatgga aaggaaatg aaaagagact tacggggaaa catgaaacgg cat 293

<210> 3510
<211> 316
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-070-Q1-E1-D4
<400> 3510

atttggatcc caaaaattgg aaaaaattca accccaaaaa aattgggtat aaaaaattttt 60
ggaaatgaat tattacctga aggaactatt atatggac ataaaggaaa aaggtgtatg 120

atccaggcaa agaattgacg cattaaataa gaaagtaaca catgcaaata ggtaaagcaa 180
acgggtgagt acagaggtgt gaaagagtgg aagaacatga aagcacagaa gaatgtaaa 240
aatggtaga gtacaaacca taaaggaagt aaaagcggga atctgagagg aggaaagcca 300
cattgaaact gagaaa 316

<210> 3511
<211> 386
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-E1

<400> 3511

cacgcgtccg aaatagacgc tcaagcaata actattcgca tcaatacgat ttatcacgat 60
atgttccagt agtttgtgaa ataatgaaag aacttttagt tcgaggccta tccaaggcca 120
gttattcctt tgtggttact gagtttggtc ctgacacttc gagtagcgat gatgaagacc 180
aagaacgagg cagatccagt aaaagtgtac gtcggaggc tcgaagtggt agcatccgaa 240
gaagaagaag tgcaagttaga gattcatcag ccgagagagg aaatagcagg tccaataacg 300
gaagtgacaa tgagagttag gtccttcgc gactttcgcg agaaaatagc aaaaagcgtc 360
cgtaattgt atttggcgt ggtgg 386

<210> 3512
<211> 411
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-E10

<400> 3512

agatttagagg acaaaccctt tgctgcttt gtcggagttg gtacaaggat gggaaagcga 60
acgagaaaagg tcggtatcg tggaaagtat ggaacacggt atggcgcttc tataagaaaa 120
cagataaaaga agatagaaaat tgcccagcac gccaaatatc tgtgtgcttt ttgcggaaag 180
gattccataa agagaaaaggc gttggattt tggtaactgta aatcttgcaaa cagatcaata 240
gcgggagggtg cgtggctct gagcacccaa gcagcagcaa ccgtaagaag taccattcgt 300
cgtttgagag aaatgacaga atcgtaacgg agcaaataatt accaacttgg ctgtttgtc 360

gcaacttgc a gtaaaactt gctgttcct ttatcaataa gaataaagag a 411

<210> 3513
<211> 98
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-E12

<400> 3513

gagataagga aaatttcacc ttgaataatt tggttggAAC caacaacaac aacaacaaca 60
acagttacct caccaaaaat tttcacaaa aaggtgta 98

<210> 3514
<211> 430
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-070-Q1-E1-E2

<400> 3514

gaccCAGCgt ccaccacgCG tccgaaggGA aattgatttG gtaaggTCgt cttcaaATGA 60
gtctatcgag acgttattgc taaagacgtt tcctaaAGAA atccctactt cgtattgtct 120
cgtgtatgca ctTTTggcta ttccagtact cgCGCTcgac gtgtatttAtcttgccgt 180
actccacttG aactttatttG cttcaagcgt ttcgttGatc atcggtaacta cagtcggctt 240
ggtgcttcta gttacgtcgt atcataaaac tgcataatGCC aagtggtaaG agtcgatcg 300
cacaacagag caaccaacca agagctttt caaggtaat ttgtcnggca tacgaagtgg 360
agttgagagt cacctatggc tcctggaaag attctcggtc agttacagtG taatgataaa 420
caacgcaata 430

<210> 3515
<211> 355
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-070-Q1-E1-E3

<400> 3515

cacgcgtcca cccaaagcgtc cgggacattg tcgtacttgg taaatgaaaa ccaaaagcaa 60
aactggtcaa acttgtgagt attgataatg aatttttga agtagacaca agcattgtat 120
ccctttctga aacaataaaa aacgtcttgg aagacacgga ggatacagag agcattccct 180
tgcctaattgt ggaaggacga attcttgcaa aggttatcga gtattgtaga tatcactcac 240
tcttaaagac cattccgcag tctgaggagg atattgagcg ctggatang gaattcctan 300
atgtagatca acaacccttt ttcatttgat tctggctgca aactatttgg atatc 355

<210> 3516

<211> 352

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-E7

<400> 3516

agttttggtt tattgaattt ggtatcaacg tgtttcaaacc aatgtggtgg ttgggtggag 60
caattgttgt atctgcaaaa aggccctacaa gctctgtact agacgcctta aacattacta 120
aggatattaa tgctattgaa ggtctatctt ggtcaactt tgcccttagc ctattccttt 180
gttggaaattgc aatagcagat ggtttgttgg ttgggtcaag aagtgcaggc tcggggaaac 240
aaaatagtgg aaatagtaat aatgcgtgag ctgttggta cttgtgaata gattattgtt 300
tcatgttgc cagaaaataa ttcgttgcgtt gtaaaaaga ttgtatttgc 352

<210> 3517

<211> 376

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-F10

<400> 3517

ccacgcgtcc agctgacacg tgaagcttgc agtttccgag ataagatgtc ggaatttaac 60
gaacttaatg cgaaagtttt cggtgtgagt tcggacagtg tagagtctca caagtcgttt 120
gccgatgaac aaaagttgac gtttccctta ttatctgatg aaggcggtaa agtacgcaag 180
ctatacggtg taccaaagag catgttattt atgcctggtc gctgcactta tgtcatttgg 240
ccggatggta ttgtacgaca catctacaac agtcaagtag gtttcgcaaa ccacgtggag 300

gaggcaaaga aggcgttgga aaagatacga aacgacgctc aaacagcaga agagtgaaca 360
cactagactg ctttgt 376

<210> 3518
<211> 386
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-070-Q1-E1-F12
<400> 3518
agttgcattga ctgggttact ataaatttgcataatcacacgttgcaaccgc tttatgaatt 60
gcatgttttt tgagatcaca caaacacttg tacactgaat gaacgacgta tgggtactaa 120
ctgtgcattt tgtatagata tcaacgtatgt caaatatgtt aacaactacg atttcccgaa 180
tactatagaa gaccaagtttc atcgcatgg acgcactggt cgtgcaggtg cccttggaaa 240
gtccccatacg ttttcactc cgatataatt ccgtgttgcg aaacaattaa tgaacatgtt 300
gcgagaagct ggacaagaca ttccctccgaa ttggctcgat ttgataaaaa catcgccctt 360
tggcgtaac aacagaaaact tttctc 386

<210> 3519
<211> 404
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-070-Q1-E1-F2
<400> 3519
acgcgtccag gaaaatttgcataatccatggggcttcc caaaattcaa aggaacatga 60
acccaaatct gcaggaacgg tttggtaag gtcataaaaa ttatcgatat tctagaagtg 120
tatcgata gtgcgttgg tttgggtat atctatttgcataatcgat tctatcgat 180
caagaaatta tgaaaacgct gactattata agtaccatata ttatccact aacgttatg 240
gctgggtat acggaatgaa ttccctcga atgccagaat tacattatgg atatggat 300
actatctttt gtttgcataatcgat gttggcttg aaatatttgcataatcgat 360
cgagggttggaa tangaagtttgcataatcgat cagatcgat 404

<210> 3520
<211> 298
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-070-Q1-E1-F3

<400> 3520

agnaaaaggt gtgaaagtaa ccaagttaaa accaataagg tggaaaata acaatggatt 60
taaaaacaact ccaatttaag gcctttaac ccaaattcctt tccttcctcc gaaaaacacg 120
gttgaaaagt caatttaggga actgaaaata gcaaggtcg 60
atcaaggaat tgctggAAC gggtaaatca ctcgtcgaa agcagaagag gggggatat 180
ttaagccaaa gtctgaagcc ggaaatattt agaggagact caacaagaac aactggat 240
298

<210> 3521
<211> 390
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-F4

<400> 3521

caagcttcc agtaatgcag gcaaagaatt gccccattaa ttcaaggatt accacatgca 60
attaggtaaa ccaaacgggtt gattaaaaag gtgtgaaaga ttggaagacc atgaaagcac 120
agaagaatgt aagaaatggt taaagtaaaa accataaagg aagtaaaagc gaaaatccta 180
atgctgggtt ttatcctcca ctcctccac cttatgcaaa cggtgcataat tatcctccac 240
ctcctcctaa tcaaggaaat atgccattt gtggagtacg acgtatgtat ggggctcctc 300
ctcctccacc tccttccttatgtttttt atctgagaat gggtaaaaaa aagatatcct 360
390
ccttattaac atggaataact agtgtttttt

<210> 3522
<211> 360
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-F5

<400> 3522

acggacgcgt ccgacaacat ccaacgaccc atgcccatt gttgttact ggagctccac 60
aaggtcagtg ttttggtg tgggtacctc gttccttgc catagcagta gttcggcgt 120
atcgattcc tatttatgtg agtcgcttgc tggtagaacg caatagcgtc tattcgtcag 180
tggactgtag aggaaagtgg tatatcgcaa accaacctgc aatttgtaat ctacctcatc 240
tatctcgaaa tgcacctatt tggaaagtatc gcatttcgga attggaaaga atggacacac 300
aacagttgta tgataccatg ataagatccg gtatctttg tagtagagca aacacgcac 360

<210> 3523

<211> 378

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-F9

<400> 3523

agacggcgtc gaataagcaa ttgtggcgt agaacaatat gttgataacct aaaaagaacc 60
gaaacgcagt ttattctttt attttatcga gtggagtaat tgtggtaag aaggacactc 120
atgccaaaaaa acacttgcag cttgacgttc ctaatcttga agttatgaag atatgtcaga 180
gtcttacttc gcggggatat ttaaaggaac agttcagttg gggttacttt tattatactc 240
tgactgacaa cggaatcgat tacttacgtc gatatttcaa tcttcgttg gaaatagtcc 300
cgaaaaactct aaagaagcct actagacccc caggtgttcg cccttcgtcg tttccatcag 360
aaagtcaaga aaagagag 378

<210> 3524

<211> 402

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-070-Q1-E1-G10

<400> 3524

cccagcgtca aaagcanttg tgttccagtc ccttggtaaa tgtcagcaaa ataccgcaga 60
tacttggaaaa tcgacgcaat gaatctacag gagaacttgc tcccatcacg ttgagttcc 120
aattggcagg aaatatacgct cgtgtatcca caactctcgat tcagttacaa aatagatgg 180
atttggcaag tatttcatt tctcttgctt tgaatgccat tcttggctt caatgtatgc 240

gttatcgatg taggcctcag tcgatgtcct cttcaagga tcgcacatcgatgtacaca 300
ctcacacaac ttgacatgtat tattcgcaat gtcacatcgatt ctccaggaga atgataaaatg 360
tatgtgtgtt tgtgtgaaca atgcaatcta tcacatctatcg cc 402

<210> 3525
<211> 385
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations.
<223> Clone ID: LIB190-070-Q1-E1-G11

<400> 3525

agtcttcan acagacgttg gggtaactcc aaggccaatt caatttaac aaaatccaag 60
aactttttg gcaatccaag gacaaaattc aagttcccg gcaaggaaag cttttccaa 120
cccgaaacta acctcaagga acaagaaggg caacgcccgtt ccaacggcgg tagcaagttt 180
ccttgaacac anggacaaat ccgttaana taaacctttt gggagagaa tgaataattt 240
cgttgaaagc aaggaaactt tttgttctta cgctgttatac atgtgcactc ttgaacctcc 300
ttatgttctt tttctagaat tggagacaag cgggttattt ttccgttgac agctttactg 360
gaacaactgg aatttgattt ttca 385

<210> 3526
<211> 197
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-070-Q1-E1-G12

<400> 3526

agcaganctg aagcgacatt ccaaattgtcc tcaagggttg tcaaccaagc caaaggatga 60
attgcaagtt aagttaacct ttgggttgc cttaaaagga ttaaggttaa atcccaagtt 120
actttggcaa tataattcaa tggaagccaa aaataaacct gtgtcacgtt aatgaatttag 180
cgccaataat ggtaatg 197

<210> 3527
<211> 248

<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-070-Q1-E1-G2

<400> 3527

acgcgtccaa gtaataacag tataattcag ttataaatca aggaaatggt aaaggcaatt 60
taatccataa ttgcggaagg aatattacac ccaaggatgg aaaaccagga tataaggaat 120
ttggaaggag gtaggatgaa tgtgagtaaa atgggagtaa taatagggag tatggaaata 180
atgggaatag aatacagtag cgtataagaa catgaggaag aaagaggcan atacggaaa 240
gcagtana 248

<210> 3528
<211> 326
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-G3

<400> 3528

aaccacgcgt ccggaaaaaa ggcaaatacg gaaaagcatt aaaagaagaa agagaaaagga 60
aaaaactgat taccagggaa aaaaaggga ttaaatgagg aaagaaagat caaggaagta 120
agagtaagag aaggagtaat gtgaatgaaa gcagggaaagt atttgaagaa gaaattgtaa 180
agcgcgtacc ttttcataa tgtcccaccc attgaaagag gaaccaaaaa gaaagaaaaa 240
gaagtaccca ggttaagaccc gaagctagtt gatcttatgc tgtccaaccc aattaaggct 300
gaaccagtac ctgtggaaaa agattt 326

<210> 3529
<211> 412
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-070-Q1-E1-G4

<400> 3529

ggtgtggact cttgcacgt acaagataaa gggaccttgg agaacgcact aagtcccaa 60
aaagattaac ttccttaaag aaaagttgag tttccaaata atgccatga ccaagttaaa 120

attggccaag gggaaaaacc taacaactt ccatctcgga aaaaccggcc ggaaaccttt 180
gctccagatt tggtncaaaa atacgggacc agtcatgtgt tgttacaagg tttgcaagct 240
tcagttaaa aaagtgggga ctacaaacaa agtggaaca atggggtcag tactatggc 300
ttaagaatac ttttatcaag ttacatcgca aactgttttgg tggatagac gaatggatg 360
gacttacagt ggaagatatc agaaggatg aagatgaaac acaaaagttg ac 412

<210> 3530
<211> 367
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-G9

<400> 3530

acccacgcgt ccggagtaca tgttaggaatg tcatggtag ggataagtag tgtaataata 60
atgggaataa tggaatgtat aaatgtggta agtaggtcat ataaaagcat ggagtatatg 120
gagaggataa gagaagagag tagggtgtat gtacgaatga gtataataac aggaatgata 180
tggagtaaag aagtgtgggg atcatggtagtataatgtat taaggaatata aagcatgtta 240
gtatgctgga tatggttgga agtaatagga ggagtaaaga aggagtacag aggaataata 300
agcagtatag gaataataaaa tataccgata ataaagtact cagtagagtg gtggaaatacc 360
ttgcac 367

<210> 3531
<211> 105
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-070-Q1-E1-H10

<400> 3531

gtccgatgac tcttccccatc atcatcatttgg aaaagtatttgg tattgcagca aactacttaa 60
atttttgtta naaaaaaaaaac tgcaaggtga ttgcttaatt ttctc 105

<210> 3532
<211> 325
<212> DNA

<213> Cyanidium caldarium
<223> Clone ID: LIB190-070-Q1-E1-H12
<400> 3532

gtcctagtagtac aatccaaggc ctttgccttt ccttggccaa ccaatccctt caatccgttt 60
agtactttgg aaaaagggtt acaaaaattgt aactgttgca aataattga acgaaaaaaaa 120
ggactgcgac tggtgagttc cttccaaagt gcgcggaagt ggacttcggt gcaaggttt 180
ttatgtcgct atagaagtga cagcgttgtg gagggagggaa aaaagcaaaa gggagtcgct 240
actgaaagaa gtcctgtttc tacagccatt cccatgggtt atgccatgtatattccat 300
cacgtgcaac gttggcgtcc aggag 325

<210> 3533
<211> 374
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-070-Q1-E1-H2
<400> 3533

acgcgtccat caattgttac ccaccaatct ctccctcctca ccccaactag tagaagaata 60
tgttggcggt tacttgtctc acagactgtc gttgggttagg taaaacaaac aatattctag 120
tcttcatgct aacctgtttc gaatttagag acttctcgat tctccagatg tgccaaagcc 180
aataccgtct cggtgcgacg tagttccag tgttcacact cttggaggag tgtttcgatg 240
aactacagtc cctattcgat aactaccgac aaatcagaag gacatattgt tcccggtact 300
ttttcaagat ttgagttct tgaagggtcga gtcaccggtc caacgtgagt atttccttt 360
actgctcgat acag 374

<210> 3534
<211> 303
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-070-Q1-E1-H4
<400> 3534

acccacccag gcaacgttac cccccattg gaaatcgcaa tcctatggaa aatactttgg 60

taccaataaca tttaagggtgg actgagggag gacagaatgt tcctgtacct ggaagttca 120
ataactggac gcctacaagg atgcagagga aggacaacgg tactttgaa gtaactgtgg 180
aagctcctgc aggcaaagtc gaattcaagt ttaatgttga aggtgaatgg aacgaacata 240
taacttatga aagcaagttg agcagcatga actcttgaa caacgttcaa ctcgtggaaa 300
303,
tac

<210> 3535
<211> 400
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-H6

<400> 3535

ggccgcctaa gtgactgcgc ttctttcaa tcctttcaaa tattgagctt ggaccatcga 60
aatcctcggt atattttga ataaaaaaacg agaactaata tggaaaaata tcgaagagtt 120
gagcgagcca aaagtccggg ccagactccg ccgaatcaag tacgaataac tgcggcgggc 180
aaagtgccag cctatgtgga ctatgcagtc aagttgcttc aagaggataa tggcaccgtg 240
gaaatcgctg ggctggtaa tgccatcaat aaggctatca ctgttagcaga aatattgaag 300
cgaaaagtcc ccaagttgga gcaagtaaca aatcttagtt cggtgactat tgaagaccgc 360
tgggaaccat tggaaagg cttggaccct attgaaacga 400

<210> 3536
<211> 351
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-070-Q1-E1-H8

<400> 3536

cccacgagtc cagcaagcgt gaaccgtgag ggtagttcat catggtttag acaaaaacttc 60
aagatggtgt tagtgcttct ctttggactg ttctgtctctt cctctacaca gttatttttag 120
cattctctgc cactatcatt ggcttggatg gacgtaaagc agacaacata tggaaacgaca 180
gcttattcta tggatggaaag tacatctaact ttgttgctta ttctgcctct tctgtttag 240
aaggagggga acatggagcg tgtaaatatg tcatggcggtt ggcgtctata atttggnttc 300

aagtctttt cttgtggctt tttacatgg tagatgcgtt gtatccatt c

351

<210> 3537

<211> 273

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-A1

<400> 3537

ccccacgcgtc cgagtcgtgg gtcgtggc tgggtgctca acgtgtgaaa tggcagtagt 60
tgaagataac agagtcgttg ttgggtggct tccttggca gtttgtgaag aagacctcg 120
tgaaactttt tccaaatatg gagaagggtgt tgatgcaagg gtttgttgg aacgtgaaac 180
tgggcgttcc cgtgggtttt gtttcgtatc ctatgcagaa ggttccggccg tagacgaagg 240
cattgccgca ctggatggca aggatatgca agg 273

<210> 3538

<211> 415

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-A12

<400> 3538

gaaaatccctc accaagaaac cacttgtaca gcgatagaag aaaggataca tagaaacaaa 60
ttgtttcaaa atgcccattt gtcctgtca tctctcatcg aaaagaatgg caaggccttt 120
caactactct acagacattt tttaggaga gatgcctact tgagtggagc agaacacaaa 180
gtttctggtc agtcccaact gtcttatcaac gatatgagaa gattcgctca ggactttgt 240
atatttcccc actatgttca actggaaact ttgagagaaa ccctgttggta tacggtaac 300
ggctacgacg aacgaaaaga ccacagaata tccgtggaaat tgaatagttt agaagaatgg 360
atacgttgggt tggtgatgtat tgcttattat gcatttggag atgaaacatt tgctc 415

<210> 3539

<211> 269

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-A3

<400> 3539
tcaggcgacg agtccgcaga gggttccttg tagattcgat gcgtccatgc agtgtttcag 60
agaaatggaa ttttcaatc caaatggtt tcgtcgtatg aaggatactt gttggatga 120
tggctgccgt gcaaacttaggc agaagaagaa gtgtgagggt aactatccaa atgagaaatc 180
ctacgcagct tccaagaagc acatatgtaa agaattattt aaaggtgatg aacaacgcgtc 240
ggcattccag aaagaaaaggg ataccacag 269

<210> 3540
<211> 275
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-071-Q1-E1-A5

<400> 3540
gacgttgtta gcgacgactg tgtgagagac tacttgtacg tgcttcattc gagtagttga 60
aatatgacga gcaagtgtca caaaacataa aacatagagt tgcatgtgtt acggatgtga 120
cacggaggag gcagccaacg tgaggttcat agacgaccag cacaaaagag ggcagagaag 180
cacaagaaaa atgttcaggt ggacggggag aatattgttt tgaaaatgga aagggacgtg 240
gaaataatgc acgaaagggg agcagcagcc atggc 275

<210> 3541
<211> 287
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-071-Q1-E1-A6

<400> 3541
cccacgcgtc cggcagtcac taaggaagct ttgtaccaca agtttcaga aaacaaatga 60
gaattcgagt aaaacgagta gcgttggtat cttaggaagt gttctaattg gtgtatTTAG 120
ctgacttgga atgtgtttat gttactagtc tttggttctc gccatactat gtttacagcg 180
taacgttgca aagataggtt gaacgtgcac cgccaatgtt ttttttggtaataaagttg 240
ttgaacataa gaaaaaaaaagt gaaaaaaaaagaa aaaaaaaaaag gggacgg 287

<210> 3542
<211> 303
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-071-Q1-E1-A8

<400> 3542

aaccacgcgt ccggatagt cgagaggaa aaagcccaga agccaggata agtatcaaa 60
gtaaagaaaag aaggaaaagg agaagaagag aggttaggct tagaagcagc agaccagaga 120
ggaaagcggtt aaagcatgaa agagggaaa tccgaatgag aagaaaaaa ggttaagaagg 180
aggaccgaat caggtaaga ggttagaggag caagaagaga agagagaatg ctgggtggag 240
tagcgaaaca agagaaggaa agtaaagggt aagaaagagg aaagggttac gagagaanga 300
303
agt

<210> 3543
<211> 373
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-B1

<400> 3543

ggtcgaggga cgcgtcagag tcaaacaacc ggcgtcgaag tccggtgaca ttgcggatag 60
gacgtcggtc aaggcaaaca gtgtcatac gaatgataag tttccggaa aaggcgaga 120
tggaaagaaaag acaatcgctt acgttaaggag tgggtgcca agcatgccaa 180
tagtcaacac acgggtggca aggacgtgaa gcaaacacta tcacaagaac aagtggca 240
ctccgaagcg agaagagagt tacgctcgag ctcagtacat gaaagtgata caaccaatgt 300
tacgaggatc ttgcggacta tcaaagtgg gctgcaggaa aaccagttag agtgagaaaa 360
373
ctgtcgctcg aaa

<210> 3544
<211> 418
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-B10

<400> 3544

ctgaaatttc tttgaccgat gttagtcatt attttgcgatc cgatccaacc aagttagtac 60
aaagtttgag agcagacaag aagaagccgg tatcttatgt tgcagacacg acaacagcga 120
atgctcaagt tagaaggcctg gacgaaatgg ttcgtttgga cacaagaaca aaacttctta 180
accccaagtg gtatgaagga atgcttcgt caggttatga aggagcgaga gagctgagca 240
agaggtttag aataactatg gtttggtctg cttccgctgg agcagtagac aattgggttt 300
atgaagaggc aaatgagact tttatcaaag acgagaacat gaggagtcga ttaatgaaca 360
tgaatcccaat ttcatttcgt caaatgatta gtactttgtt ggaagccaaac ggtagaca 418

<210> 3545

<211> 320

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-071-Q1-E1-B3

<400> 3545

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gaacagaggg gaacgagttc gagagcagag gacgagaagc aacgttgcga aagacgagag 120
aatcgagcgc tgcagagaga taagagagta gtgtttacgt tgggagaacg aagggaaagcc 180
ggctgttatac tccctgagga gcgcattctt tgtcaacatt gtgaggctgc tgtangaggt 240
gggttcaag aggaggtag cgtcgccctt tgttcgaatc actgactatc tcaaggagta 300
cgcggatgtc acgcttgttc 320

<210> 3546

<211> 404

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-B5

<400> 3546

gccactgcac gtgttgtttt ttggggcaac gaaaaggata agagaggaag gggcaatgca 60
tatatgaagg aatggaggga aaatcttgt taggagacac ccttagaaaa ccgc当地ata 120
taaaagatat acagcaagac aaggagaacc ttttagaatc ctggacggaa acgagtcttt 180

catcaagaat tgctcaaaag tggggaaagt taccgagttac cagtttgttt tagtacact 240
ctccttctac tagtattgct cataaagagt ctctctcgga tgagaacgat aaaaatcgca 300
tcgatttgga acaactattg cattcgacaa agtcccttc tatttcggac agccgctatc 360
ctttcaaaga cgaaaaaaagc accaaccatc gacaacattt atta 404

<210> 3547
<211> 113
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-B6

<400> 3547

aatttctggc ggaagaagac atttcatttc atttgtgga gtttgaggtg tccatttctc 60
tcgtgttgta tcgcgcactg ttggtttcct atttgtctct tatataact gca 113

<210> 3548
<211> 294
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-B8

<400> 3548

cccacgcgtc ggctgacgacg tccgcccacg cgtccgcgtc caggaggcaa gtctcttatac 60
atgtggtagt tttccaaata tccttggaa acacgtgttt cgtctactca cgaaagagta 120
ttgcaccagt tactacgggc ggtgtgtat ccacagtaaa gtataatagt cctttgcagt 180
ttagtaaagc agagatatgg agagcttctt atccaactgg gagcagaggt gcctttgcag 240
aacaaaaaggc acagcagcag tcgaaagaag gtgaagaacc ggaacgcctt atca 294

<210> 3549
<211> 417
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-C10

<400> 3549

cgtatgttctc ttccatccaa ctttgactgt aattattgtt acactttagg acataaccgt 60

ggagccttga ttgaagggtgg tcgcactggc ctttgtcaa cggtaacgtca cttaacaaaa 120
cctcccgagc aatgggaagt tggaggttat ccttgaccg tcatgatgga catcgagagg 180
agaaaggaa agaacgttcc cgtcatcaaa aaggcggtgg tggatttggaa aggcgaggca 240
tttcgcataat tttctgagca gcgggactcg tggcgttga cagaagatta tcgttgcct 300
ggccttattc agcatttcgg tccgatggca gattcgatca acttcacttt gatgtcgaa 360
gcacgagata gcaatgagta gtttgggt gagaataata ctctcggtga aataaat 417

<210> 3550

<211> 419

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-071-Q1-E1-C12

<400> 3550

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aatgtccat gttgtgagca agtctccctt acacccaaca gcgggttcttc gttctggagc 120
agcaccaagc ctgcgcattat tctctggtca aagtggaaaga ggtcttggga gttttcggt 180
cttcaaagaa cctattgttc cattcaatac ctttctacc agtggctta gcaagggtgg 240
ccaggaatct gacgcccact tccagccaaa gtttaagagg cctgtctctg ccaatataaa 300
tgacgtcatt aagcagcaag tagaaagtcc cgatgttgg ctatatatga aagggtctcc 360
ttctgcacca atgtgtggtt ttagcttaa ggtggtacan atattgaatg cttgggggg 419

<210> 3551

<211> 314

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-C5

<400> 3551

gtgatgaatg gaaactggca atttcgaga cttcgtgtac gaacgaaaga cttgctccag 60
aaagtcaatc aactttgaa cgattgtaa ctcgcagaaa gctttctga agattggaaa 120
gaaagtcttg gtaagttgg agaagtgtca tggacgaaac gagaaacagt gaacgggtca 180

aaggagcaa atatatgaaa agtacacttc cattgtcacg ttagaggagt tgctaagaaa 240
agatttagaa gtgattttat gttcattctc aaagtcgctg gtaaaggcta aagttgtgc 300
gagggagagg ctcc 314

<210> 3552
<211> 325
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-071-Q1-E1-C7
<400> 3552
agaaacggag agaagggtat cggaactcgta taggaggta tcggaagcgg tacacagttt 60
acaaaaatgg caaacgcaga tggaaaattt gcgaggaacc aaagaatggg aacaagccga 120
tgcgttgtta caacaagcac agcaggaaaa atcacagacc tcgaaagttt aaccagacaa 180
agcaatgtat tgaaactgca tcgacttgtt caagatgcc acatcgtaat cgaatccttg 240
ggttacaaac aatcggttca ggacttgcatt cctgtcttga gtcagataaa gaggtttcc 300
gcgaggggggg aaaaaatggg tcggg 325

<210> 3553
<211> 384
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-071-Q1-E1-C8
<400> 3553
ccccacgcgtc cgccccacgca tccgcccacg cgtccgacaa acctaagtg ggtcatccca 60
cgttgtaaa gatagacttg tctcaaggca gcttggaaagt actccaagac tgtgacagag 120
atttagaatg tgatcagaat agcaagttt agttggaaact tattcagtat ggtctcgtt 180
cacctggttt ttggacgaga gaaaatgttc tgctttcta gttggagctc gtgtcagggt 240
tattcataag ggacactctc tacctttctt acaagaaagg tgaagaacat ttgtttgcga 300
gttgaatgct gttgttggag acacaagttt cactgtatgc agacataaaa gcacgctggg 360
agaagcgaca ctttatcggt tgcc 384

<210> 3554

<211> 409
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-071-Q1-E1-C9

 <400> 3554

 cccacgcgtc cgcccacgca tccgcggacg cgtggtaga aagaagagag tgtaaggcgg 60
 cgtcataata gaaatccgaa aggagtagaa gaaaagagag agaagaaaga aaagaagaga 120
 aaagccgtac tgaagaccga cacaggtact cgaggagaaa ggagacccaa attaaggta 180
 gagaatggac gataaggaac taggcaaaag gatatggtat ctgcggtagg cttagaagca 240
 gcaaaccaga gaggaaagcg tttaagcatg aaagaaaaga aatccgaaaa agaagagaaa 300
 aaggtaagaa agaggaccga atcaggtaa gaggtanagg agcaagaaga gaagagagaa 360
 tgctgggtgg agtagcgaaa caagagaacg gaagtaaaag gtaagaaag 409

 <210> 3555
 <211> 413
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-071-Q1-E1-D10

 <400> 3555

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 gtttttccta ggcctagtac ctattcgacc aggagtgaaa atcttagacc ttgcctgtgg 120
 tagtgggaa acctcccttc aagttgctca cctagttcc agccacttaa aggtgaagc 180
 caaagacgca aagatagtt gcgttgatat ttccggacgaa atgcttaaag ttctcaacca 240
 aagagcacag gaaatggggc tagcaaatat ggtggaaacc cgctgtgagg acgccgagaa 300
 ggtcgacttt ggtgcgcact attttgatat ggttatgagt cagttggag ttatgtttt 360
 gcnccatctt gtggaagact tggcgaggat tcgcggatg atgaaaccgg gta 413

 <210> 3556
 <211> 99
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-D5

<400> 3556

taatggact acatgtcggc atgtcatggt tagggataag tactgtaata ataatggaa 60
tcctcggaat cccacatgtg gtaagtacgt catataaaa 99

<210> 3557

<211> 379

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-D6

<400> 3557

gtcgagaagg accacagaat gtttggtggt ggtcgttga ctgctgctt ggtttatcgt 60
ctgaccgaa atttttgttc caaagtatta gaagatactc ctagttgtt tacagcaaga 120
aagacagtac catctgtcga gtgcctctgc agctcaagga agtcctaatg tcttggctca 180
agttgcatat ccagttgtgg agaatactcg tatgaaagct ttggtaaaag cgaaagctgc 240
accaggtttg gtattgcgtg atgatattgg aatagcttct agtggaaagta ccgacgtatt 300
ggataggaga ggtaaaacga gtagaggtgg aacacacgtg catatatatg tttggatga 360
gtggagcaaa agcactgtt 379

<210> 3558

<211> 378

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-D7

<400> 3558

cagcgcttgg gagcgaaact gtttgtaat ttggcaaagg aaatcgaaaa gcgttagtaaa 60
caaggcaaat cctcgtttga agtttggAAC gaatgtttAG acttggctgc cgaagttggA 120
agagcacata cggagttgcg aagagcagaa ctttcggAAC agttgatACA acgagcgtAG 180
gctaccgatt cttctgtcgg aaacattttg aaacagtgtc aaacgctgtt tctttacat 240
ttgattgaca aacagtgcAC tttcttgcgt tagaattgcg tatctcctcc agacgcagAG 300
gggttgcATC gagtacgAGT cgagcttGT atgcaacttc gagagcaggc acggcTTTg 360

gtggattctt ttggaata

378

<210> 3559
<211> 377
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-D8

<400> 3559

agagaaacag ttcctgtagt gatggtagc gatgattgga tacggaagcc tatgtttctt 60
cttcgcctac tgactgagaa tactctaag agattggaag tttaccatat tgtgacattt 120
gatggttcct ttagaagtg caacgttagt tggtcgtaa tattaggaga taagtggaa 180
ccagatagtt acatattttt acttcagaat gcggagagac tcggacacga gcctgtggca 240
ggttcattcc tgcattcgagt agtttgcgg atgaagtctg agagagaaca gaataatgtg 300
agcacgctaa caagttcttg tcagcataat cagccagtgt tgaatttagc ccgagtgtcg 360
aaggaattgt ttgcggc 377

<210> 3560
<211> 412
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-E11

<400> 3560

cccacgcgtc cgaacaaaag ttgtttcag tagaaggttc atgggaccac caaatcagaa 60
tcaaagatgt tgcaaagaaa acagaccgcg ttttgttga ttacgacgat attgcgaagc 120
gttatcgaat gaaactttt ttgcctccac ctgaagcatt agaagaaacc aattcgttat 180
atgtatggga aggctgcact cgagcttatt tagaaggaaa ttctaggctt gcagccgaag 240
agaaacataa agtagaagaa gaacaacgta gactacgtcg agaaaggatg caacaaggaa 300
ttcagtggga accaaaatat ttgcacgct catctgatgg agaaggctat gaatttcgtg 360
aagaaactgc agaaaaattt tttcatggtg caagtaacat gtcttcatca ct 412

<210> 3561
<211> 196
<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-071-Q1-E1-E2

<400> 3561

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gcaccagcgg ttttagata gagaaagcgg tgctggtgac gacgccagcg tcgctagttt 120
gggttgcgg aatattggaa agagcgctt gtggaacgtc ntattggca cctcatttga 180
tgttggact gatcgc 196

<210> 3562

<211> 332

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-E5

<400> 3562

gggaaatggc gcgagtcgtt tcctccgtct tgcaagcgttt ggacctcaga gaagatgctc 60
aagtattctc cctcaactat tggtataaaa acagggttcc ttattttcc atggatagaa 120
aaactttatc aacaggagcc gggcagtc tt ctaccgagaa gaaacctccc aaatgagacc 180
acttggtttc tgtcttcata gatggagaag aacgttgggt accgaagggt ggcactattc 240
ttcaagcttg ttagtttca cgagtagaaa tagtcgttg gtgttatcac gagcgtctt 300
gcgggtgggg gtaattgttag gaggtgtctt gt 332

<210> 3563

<211> 334

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-E6

<400> 3563

aacccacgca tcggacagaa cattcatcaa ctacgtcgat atgaactaaa ctagcagtat 60
gaataatttc agtaatttct gcaagtcttc tgtaaaaaaa tttaattgat tttttttct 120
tgttgcttt agcaacgaag aagaggatag ctggacgtaa tctttccct ccagcagtaa 180
ataagtgttc agctgctaca tctagtattt catgtttga cgtaacaagc gttgttaaat 240

taatttctaa taaaatata tcgtgttcta taagttgaaa tgtgtctatc atgaattaga 300
ggtgaggatgg gtgagttaaag aagagagata taat 334

<210> 3564
<211> 262
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-E7

<400> 3564

accacgcgtc cgctcgaggt tggtttcgca agatgattt ccgtgcaccc taaaatattac 60
tttatataac aacctataac atggagcaca agtccgagat gtgtggtaaa gaaacagaag 120
tcaaccagcg ttcgacagag atggatagg ggtgataagc atagctctcg tccaatggc 180
aagcgtttc acatatggtt aaagtccctg acaagtggag gggtatttca gcggtaagt 240
ggggtagtg gggctgttg gg 262

<210> 3565
<211> 250
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-E9

<400> 3565

cttggccaca gaaaatgacc gggaaagtgc agagtactta cttgtgttag agacaatgg 60
aaacttaggag ggttttagt tgcctttgg tttcaataca tacttgaggt ttataggaa 120
aaaaaaacat ttgttggaaag ctacttgttgg ttttattta ggcttggta aaagtacaac 180
aattttttt ggagttgctc gttcgacaat tctacggat ctggttctt cttcccttc 240
tcctcgatctg 250

<210> 3566
<211> 443
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-F10

<400> 3566

tcccggtctg accaacgcgt acgcccacgc gtccgcccac gcgtccggaa aaagcctcct 60
gaacaaagta acagtacagc agttgacagt tcagttctg tgtaccagag gagagataca 120
aataactcctc agactcttc taatatgatt ggaaggatt ttgaaacgca agaaaaaaga 180
atattgcgtg agttggttt gcagtcgatt attcagcaga cgccatcggt taggaattct 240
attgtgtgtc actcagttgg tagagatgga ctgattgttc cttattatct catagagaag 300
atgaaaatga agcgtcaact ggaaaatcta atagcacaac gacgtacgg gacctggaca 360
gtggaaggaa agaaaggaaa agttgatgta aagaaaatatc actggacggc taacgagaag 420
aataacttt tcagacttgt gaa 443

<210> 3567
<211> 432
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-F12

<400> 3567

gaccaacgcg taagaggatg acgactgtga gcactcggt catcaagtac aactggaaag 60
ccctgtcttg tattggaaag cagcaacaac aaccaacaca agcctttct agtgtgcaat 120
atttcaggaa gagtggttaa agtttctagt atgtcctgtt tccaaacaaa ctttgtacta 180
tgactcggaa cgcgatgaat tattcaacca atcgataaga tatccaattc gtgatggtat 240
acctttgttg actccttggg atggaagtgt cgttgaccag ggagaacaag tagctcgac 300
aaaagaacaa caacaacaac aacgagaata gtagataaaag aaccatcttgcgtgctctgt 360
gaaagatata gagctcgcta tttgtccctc agataagaga gcactcatag actaggagat 420
agccaatgca tg 432

<210> 3568
<211> 151
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-F3

<400> 3568

acatttggAAC tgacaaaagg tccaaacctg acaagtccac actcgcaaa attgggcaat 60

gtacaggaa gttacgcgca gtaatgagga gtggagtaaa cagaaaagga actataacgg 120
cgcaaggaac ggaagttatg gcaaaaacac g 151

<210> 3569
<211> 320
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-071-Q1-E1-F4

<400> 3569

ggtcgacgac gcgtccaccc acgcgtccgg gaaaggatat ggaaagtgc ttgaaagaga 60
tagccgacta gatggtgaca cctgtaaaaa ggtatttag cgatctgatg aacctcccgg 120
cgttgtata acccacgtt cgagcttgg gagtnccgaa gaatgcggga gcgagaanga 180
ggtggcgtga aatattataat gggaccaaag gattggagca atatgttgc gctgctattc 240
tgcattgtga aagttgtgaa caacaagatt catccactgg gaaaccgtt gtagatgtgt 300
tatctgacaa aggtatatta 320

<210> 3570
<211> 297
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-F5

<400> 3570

acggacgcgt gggtatcagc agccaagccg caaagcgaag caccaaccag aggggaaaag 60
tcgtttgtt gtggttttta ctggacgctt gtgcgcactt gacaacagaa cttgccttg 120
tataccactc cttaagcacg ggcgtccgac gagccacaca ctggactgcc ttgtggtgg 180
aggaatatgc caaagctgat acgagatggg gtcgtttca ccattgtact ggggcgtgg 240
aagtagttac ttctctcctt gtgggtcct ctagctctcg ggtgtgccta tgggtgt 297

<210> 3571
<211> 386
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-F6

<400> 3571

gagaaaagaag aaaacgtgag cgatgcattcc gtcgagcaag tacaacagag actgcacgag 60
ttgttagaaa acctggatac gttggaaaga caagttccc aactagagta cgacagttgc 120
cgcaaggaaa ccaaccagga cgtgcagcaa ctcttaccac aatgcaaata cttggagag 180
tatttgttac aactagctct acaggtggac gggttacaag taagagccta gttgccttgg 240
tatataactcg tgtgatacat ttggtcctag atttctagag aaagtgcgc aaggcttt 300
cgtggaaaga gacaagaaca ggcaaggaa attaccaggc tagtgtctca acgaaggaaa 360
accaacgaac gagtgcaact attgct 386

<210> 3572

<211> 334

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-071-Q1-E1-F8

<400> 3572

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atgtgagttt gggaaatgtt tcgtatgggt taatggagag tgtggtaatg gaagaggata 120
agataatggg aataatgata agaatgggag taatgacgaa atcatgcag atggcattgc 180
agacgtggtt atcggatgcg atggaaggc cgactccagt cggtgactg agtcatgcag 240
cgacgttagt gacggcggg gtgtatgtgg tgataaggat gggaggaata atacgaggaa 300
gggaaagagt gagangaatg ggacgaggaa gtat 334

<210> 3573

<211> 296

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-F9

<400> 3573

ccccacgcgtc cggtcggtt ccgcaaaagag tcgttaggtt tcaaaaagcgc aaggcggaaag 60
gctactttac atacaacgcc gggaaatgtc accgatacat caacacaccc atttacctgt 120

ttgtgtcctt caccggcatt tatgccttta ttgacggttg tctttggcg gcagggaaaga 180
aggaaagtca atcgtgaata gcgttttg tccttgcga cagtcttatg aactagtatg 240
tcgtttgttc tgccagttt agtttcttgt aatgaaagtt tcctttttt ccttgc 296

<210> 3574
<211> 296
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-G1

<400> 3574

agaaaagttt agtcaacgca ccctcatggt acaaacgcac tagaagaaac aaggaatcac 60
aagtacagct gtgtgatgga gaaccttgtt agtttcttgt gctatcgatc ctatacgatc 120
aacgattcat ttctgtcaatt tgaaccgcac gttgatagca atgccttgcc agacaatatt 180
taggtactgc gtgtttttc ttgcaacggtt ttccctgttag tccttctctc gctttgatt 240
tagcgcaacg ctcttatact ttctcggtt gggtatcgct aacggaagaa atatgt 296

<210> 3575
<211> 432
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-G10

<400> 3575

ccggctcgac aacgcgtacg tagctgtttt gtgtgtgtgc ctattactgc gaaatacgac 60
catgaagctc tcgaacaaat aaaagaggca aagcggttgg gagcggaccc ggtggaaactc 120
aggttggatc tcctgcacaa cttggaagat gagtggaaac aactagtgaa atactgttca 180
gtacccaaga ttgttacttg tcgaccgcaa tgggaagggtg gaaaatatacg cgaccagag 240
tctcgtcggtt tatccattct tcgtgaatct tgccaaactgg ggtgtgtgga atatgtcgat 300
gtggagttgg aagctgtcga aaagttgaa aagccggcga attgttcttag catattgata 360
ttatctcgac actcggtggaa tcgagctttt tctcgagaag aacttgcac gatataactcg 420
tccatgtttt ct 432

<210> 3576
<211> 416
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-G11

<400> 3576

agcgaaactg gttgctaatt tggcaaagga aatcgaaaag cgtagtaaac aaggcaaatc 60
ctcgttgaa gtttggAACG aatgtttaga cttggctgcc gaagtggaa gagcacatac 120
ggagttgcta atagcagaac ttccgaaaca gttgatacaa cgagctagtgc taccgattc 180
ttctgtcgg aacatttga aacagtgtca aacgctgttt ctttacatt tgattgacaa 240
acagtcgatt ttcttgcggtt ataattgctt atccctcca gacgcacaaa agttgcattcg 300
agtactagtc gaactttgta tgcaacttcg agagcaggca ctgccttgg tggattcttt 360
tggaaatacca cctcatctat tagctccttat tgcccttgat tggatagaac ataaca 416

<210> 3577
<211> 441
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-071-Q1-E1-G12

<400> 3577

tcccggctcg accacgcgtt cggagtaaac agaaaaaggaa gtaaaaggag ggaatgaagg 60
gaagtttatgg caaaaacacg tgccagcagc agcggtaaaa cgtgttagc aagcgttagag 120
cagaagaact ggggtgtaaag gtcgagtagt agagtaagt taaaaggaa aggaaaggag 180
agaaagagga aagggatgaa atgcagagat ctctagagaa aggcaagaaa gaaaagaaaag 240
gaagacacag taaatgaggc gagaaagcat aggaagtgaa acggattaag aacccgtgtt 300
gtctatgcag taaaagaaaag aatgagtaag aaaaaaggaa gtcattccac caggggagta 360
aaggcgcang anagaaaacgc aaagcaattt acggaaatcg gaaaaagggg tggatcacgt 420
aaatataatcc gataaaaacgaa g 441

<210> 3578
<211> 144
<212> DNA

<213> Cyanidium caldarium
<223> Clone ID: LIB190-071-Q1-E1-G3
<400> 3578

gagctcaggc caatactcga gaattgcgag atatgaatgt gaataaacca gtcctcattc 60
atgtggagtgc cagtagggc cgtggttatc ctccagcaga gaaagcgta gataagtatc 120
atggtggtag gagtttgac attg 144

<210> 3579
<211> 213
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-071-Q1-E1-G4
<400> 3579

cggacttcgg gagactgcta ccgaaaacgc tagttttta gtggagacgc gaaaatagcg 60
agcgagtata agcttcaac gtgctggcca agtacaagtg ttgtgcggat caggtaagag 120
cgcgtttaa catataacga gagatagatg tatcgtaac aatagaaaact gagagacttt 180
tatgcgtcga cgccccgan aagctgttct ccc 213

<210> 3580
<211> 301
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-G6
<400> 3580

aggaaagcca cgttggact gagaaaaaggc ccaaacaaga gaagtcagca gtggggaaaa 60
ttgggcaatg tacagggaaatg tatgaccagg taatgaggag tggagtaaac agaaaaggaa 120
gtaaaaggag ggaatgaagg gaagttatgg cagaaacacg tgccagcagc agcggtaaaa 180
cgtgttagc aagcgttagag cagaagaact gggtgtaaag gtcgagtagt agagtaatg 240
taaaaggaa aggaaaggag agagagagga aaggaaagaa atgcagagat ctctagagaa 300
a 301

<210> 3581
<211> 379
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-G7

<400> 3581

cccacgcgtc cgtcttgggt cgtcgcgttt tggtgacaag gaaagataaa tggtcgtcaa 60
gtaggcaacg atatccaact cgcgttattt actaaccact tgtttgtgtg tgtttctata 120
gaacagaaaac ctgttagttt tcaggtttcc gcatctaccc cggaaaaggc actcgatttg 180
tgcgcgaaaa tggcaaactc ctcatctta gtaaccgcaa gtgcagatcc gactttcata 240
tgcgttaggag accggcagag ttgaatttga cgcagttgct atcgaagaat gcacaaaagg 300
ggagagcagg aggagacaca tagaggacgt cgtacgcgca aagttgcggc tgtggcgaaa 360
ccggtcgaag ggcgcgtcgt 379

<210> 3582
<211> 356
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-G8

<400> 3582

aagaatagag tcgctggata cggaagccc aaggcattcac agtgcccaca aagaatttgg 60
aatgaatttg gacacagcgt tggcccaaca aaaggagttt gacggatatc ttcaaacgtt 120
ggagaatcatcg ttggaaaaat agtttggatc ggtgggcgtat atgggatcga cctcagcgaa 180
ttatgaaaga gaagaaatgt atcgaactgc taccaaattt gcatcgaaat tggagacgt 240
tggaaactca ttgagagaag tggcgccgtatacagcaa atgaacaaac cggcggaaaga 300
tcgagtagtt ggagagattt gtgccatatt ggtgcacat cgcaagtcgt tggag 356

<210> 3583
<211> 371
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-H11

<400> 3583

acttgaagtt ggatgaaaca ggaacgcggc tgattcctca gtttgacttt gtttcttatg 60
cagctccaga tactccacaa tgtggatatac tttctaccat caaaaagaaa agtgataaagc 120
ctgtttccgc gcaacaagac aaccacagca gggacaacaa caacagtccct aataataaca 180
acaatagtca tcccaaggac gatatacataa atggagagaa cagtgtacag gacattacat 240
ctaattcacac tatgaacaat aataataata gtcataatag caatatggaa tcctatcagg 300
aaccagacta tgataaatat attcaaggta gttcataaag aattttttt tacaaccaa 360
actgacaaac a 371

<210> 3584
<211> 442
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-071-Q1-E1-H12

<400> 3584

tcccggtcg accaacgcgt acgccacgc gtccgttcat tttgttacat cacctaaaga 60
aaacataaga gagaatataat aaatgggtcg agtgagaacg aaaacagtaa aaaagtcggc 120
ccgagtgtatc atcgaaaaat actattccaa gctgactctg gactttcaaa cgaacagaag 180
aatatgcgt gaagtagcac tcattccttc caaacgactg cgcaataaga ttgcatgttt 240
tgtaacgcac ttgatgaaac gtatccaaaa agggactgtt cgtgaaatat ctcttaaact 300
acaagatgaa gagcgtgaaa caagaatgga cttgttcca gaagttcag ctatagatgt 360
gggtgaagtc aagatcgatt ccagtgacan aaatatgttgaatcggtgg gttataaaaa 420
atctcctaat gtgggtggaa aa 442

<210> 3585
<211> 300
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-H5

<400> 3585

acggacgcgt ggcttggaaat cgtcgctgga caagtaagaa taacaaggat aaacttgcga 60

aaaattcagc ggttcaacaa caggaacgca aatcggaacc acccaaggag aatagtgtt 120
taagaaatca gtctcttgg aagcaggtag cgtctcatc caatcctcca gtcgacaata 180
agaagcgtga ggagaaaccc aaagtggata gtccttcgag gnatgcaaaa gacagatgga 240
atcatgaacc tcctcatcca actaaaacccg ctattggaga cctgtcacat acaccgacaa 300

<210> 3586
<211> 382
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-H6

<400> 3586

aggtcgctgc aggtatgtta cgtggtgatg ttcaacagac gcattggctt gagcatgaag 60
agtggtaaa cgtgacggag acaaacaag ttaaagatga gaaatgtatt ttaatcgatg 120
ttagaaatcc ttaggaagta cagtccgaac ctgtaccgaa tgcacagaat attccagttc 180
gtgatattcg aagtcagctt gataagttac cgaaagaaaa gaaattgct gtgtgttgtc 240
gctcggggca gcgttcttat ttggcatcca gaatgtgaag tcagctgggt tttcatgtga 300
aaaatatttc gggtggttt ctgtcgatc gagatgtgaa ggcaagtgcc gagattcggt 360
agtggaggtt gagccttgtt tg 382

<210> 3587
<211> 351
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-H7

<400> 3587

cccacgcgtc ggctgaggcg tccgcccacg cgtggcccc cgcgtccgca agaaagtaac 60
cttcgagtag tccaatcttc tttggggca agctgtgtcc tcattctaag tataatctgt 120
gccattcatg cagtaggagg cgatgagata agaagttcg agagaggata ccaaacagtt 180
gcaccaactc agacgcagca atgtcaaaag atttgtgtca ggcacacaca gagtcaagtt 240
caaagttgta ttataactca gagacaggct ccgtgcgtcg cgcaatgtgt cacagcattg 300
ggagggaccg ggcataaaga cgtggcgaa tataaggcagg tgtgctgtga g 351

<210> 3588
<211> 386
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-H8

<400> 3588

aaaagcctaa gagagagtga attaggcaag caaaggcatg agagaagtat aatagcagaa 60
gcatgcttga agaaaaagaa agaggcaa at acggaaagc agtaaaagaa gaaagagaaa 120
ggaaaaaaact gagtatcacy aagaaaagag ggagtagatg aggaaagaaa gatcaaggaa 180
gtaagagtaa gagaaggagt aatgtaatg aaagcaggaa agtatttgc gaagagagt 240
taaagcgcgt accttttgc taatgtccca gcgagtgaaa gaggaagcaa aaagaaagaa 300
aaagaagtag gcaggtaaga cccgaagcta gggtatctt tgctgtccaa gcgaagtaag 360
gctgaaccag tagctgtgaa aaaaga 386

<210> 3589
<211> 200
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-H9

<400> 3589

gcgtccggct tgtctttgc aatctacagc tttgtgttct tttccataacc atttttcata 60
actgcttggg tcttgaagtc gaaaatctgc agacaaatca atgacacgaa tatttggagg 120
aactcgcgag atatattctt gactagtctc atgttggaaa caacagaaaa gaacttgtaa 180
actgtttata agtttggagt 200

<210> 3590
<211> 252
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-A1

<400> 3590

cccacgcgtc cgagaattag aagccgctt ttccaaggca gagaagaatt tgtcccaagt 60

tcaaaaactcg gaaactggtg aagattggtt tgcacctcga gatattcgca agagagacag 120
tggaaagagga ttgaagcttt tataaccact attcagtagt agttgttgt tgaaaactag 180
aaagaatcgt attgctgctg ttgatatata tattgtatct ttggatttca aatagtaaaa 240
tataatgact gc 252

<210> 3591
<211> 318
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-072-Q1-E1-A5
<400> 3591

cgacccacga gtacgcccac gcgtccgccc acgcgtccgg ggaaagagag gaatgttgct 60
gttgcaatga ggatgaggag ctatgatgag ttgcatacg attgtcatcc cgattctcg 120
gggtgtggta attggctgct ctgtccata ttggatata gctcagacac atgccgagtc 180
gccctctata ccccttagaa tacagctagt ttccgctcg 240
ttacgcgct gctgttgcg tttgcaattc tcacatcgga aacatcgatc aacttgctgc 300
tggtaaagtt cgtccatg 318

<210> 3592
<211> 400
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-072-Q1-E1-A6
<400> 3592

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gatacaccaa gagaaagtgc ggtgctttat aaggaccatt tgatcattct ttgcattcct 120
gtttttctt attgttgtt tggcagaaat cctacgagat aatttggag catattccaa 180
gcgagggaag agtgtccaac gccgtaaaaa tcttcggtag cgtaacgtcc tatggggata 240
tatatgtgtg agagagagag agagaaaagg gggatgcaag ctttcataac gaattgcgtg 300
aaaaaaaaag catgatggat agcctaccag cgactttgag gatggcgtct tcacctcctg 360
ggtgatcttc caggaaatcn gtgacggcgt aaactttttt 400

<210> 3593
<211> 397
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-A8

<400> 3593

agcaacgata acacagggtgt ctaggcaaaa tggatggaca agcaacccaaa cagccaaata 60
acaacataaa gaatagtatac taatagaata tatctttcca atgaagaaca ggagccaacc 120
acacaaaaaca cacacaccaa aaggatgaaa aacgacgatc cattggggtt ttcatgttgt 180
cttccaccag agacgacatc tcgacgagta gtacttgaa aggtcaagta tggcagagt 240
ctcctgatga agaaaaccaag cagtgttgc aatctttacg ttccaaagta caatcgatgg 300
acttgactcc aaaagagttg gaatggtgc acgacgcttgc tctcttgaga tatttgcgcg 360
ctagaaataa tcatgtggac aaggctttgg agttgat 397

<210> 3594
<211> 342
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-B1

<400> 3594

acgcgtcagc acacgcgtcc gccttgggt gtatccttgg atggttcca cctcatatcg 60
actagttcgt actacaacag tttcttcaa gcgtggatta tcgcaagcag tgaaaagcga 120
tcaagctact tctgcttcag aagcgccctca agtttcttagt gggggttccg ctttacatcc 180
ccagggaaata cccaaagatg ctgtcaagtt ttcattgaag cttttgccca ctcacacct 240
cgaagctcca gaaccgcgttgc tttatgctac gaaagaacag ttactggcat atcatcgac 300
gatgacagtt atgaggaggt ctgagatcag tgctgatcta ct 342

<210> 3595
<211> 362
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-B3

<400> 3595
cccacgcgtc cggcaatttt attgcagcggttgagatgga caagttgagt attggttcggtttca agaaaaacgt gtcgttgta gagtagactt taatgttccct ttggataaac 60
aagtaagtat tggtgccaat attccacata cacacacaca tatatatata tatatataga 120
tggatagata gatggataga gagagactaa cttgtgtata tagacaggag caattaccaa 180
cggccaacgt gtggatgcaa ctcttcctac catcaaataat atattagaaa aaggagcaaa 240
aagcatcgta cttctttccc atttgggtcg accagaagga aaagtggaca aaaagtattc 300
360
gt 362

<210> 3596
<211> 277
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-072-Q1-E1-B4
<400> 3596
gcgtgcactc tgacggtatt tcaacatggc tcacatcacagt tcacatcacat cgtgtgagag 60
cttcgttttgcgtttcat cgcatcctctt agacagttat ttttagtatttc tctgactcta 120
ccagtggttggattt ggattgacgt aaaccacaga acatatgcaa cgacaacata ttctcatgaa 180
ggaaagtata ttgaactgat ggcgttatttc agcatcatct gatgtataat gaagtgacta 240
tggcacgtgtt aaatataatca ttgagttcgc gtctata 277

<210> 3597
<211> 359
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-072-Q1-E1-B5
<400> 3597
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tcgagaggaa aaaagccccag aagccaaat aaggttatcaa agtaaagaaa gaaggaaaag 120
gagaagaaga gagggttaggc tttagaagcag caaaccagag aggaaagcgt taaagcatga 180

aagaaaaagaa atccgaaaaa gaagagaaaa aggttaagaaa gaggaccgaa tcagggtaag 240
aggtanagga gcaagaagag aagagagaat gctgggtgga gtagcgaaac aagagaaggg 300
aagtaaaagg taagaaagag gaaaggttta cgagagaagg aagttagaaag aagagagtg 359

<210> 3598
<211> 382
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-B6

<400> 3598

cggacgcgtg ggttcagttt gatcccacga agagaccttg tgcgaaagaa gcgttgcagg 60
atatttattt ccgtgatttg tatgaggccg actgtgaact tgttgcaaag ccttgcctc 120
ggAACGAGTT tgcatttgcAA gcgaagaAGC ttccaAGGA tggaaataagg atgttgtttt 180
taaaggagat acttgagttt catccggata tcaagaacga gcttcaaggc tgtgagcttc 240
actatgaact tccttcgcaa gcggaaagctt tttagacaggc agtcaaatcc aagttgggag 300
gtaatcggtt gagaaaactat gagtcgatgc cgaaagagaa gttgtcgcat cacgtatcgc 360
gtgcttacaa tgacatatta gt 382

<210> 3599
<211> 382
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-B7

<400> 3599

ccccacgcgtc cgggacccaaa aaatggcgct tagtctcgct gctcgtgtgg tttcacggcg 60
ccttttttgg tattcaaggc cttggagact ttttgcact gacgcggaa gtggaaagaa 120
tgcaaccgat gccaaacact cgaggatggc acaaagtcaa ggagttcgg aagctgcgca 180
agaaaagtggc tccggggaaa ctacctact ggaacagaaaa cttccacctt tggacctgtc 240
aaacttggtg aaaggtcgac atccaaaaga caccgaagtg tataaggagt ttcaaagaag 300
acttgaagag ttcaagcgt cgttccaagt agagcatgtc ccggtaact ttgaagagct 360
gaggaagaaaa gtgcgttttc ct 382

<210> 3600
<211> 358
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-C3

<400> 3600

acgcgtccgc acacgcgtcc gcaaagctct tccttatatt ctttgctt ggacaatggt 60
tgcaaagact gctctgagtt gcctctttct ctcttcctt atcgctgccg cagttgcagc 120
cgacgttagtt tcagaggaga gatggggata tgctcagcaa acccaacaac agcaacagt 180
ccaacaagta taaaacagt atgcatacta tcagagtcca gtctgcactt ccgtaaccac 240
acagagccca tactggaccc aatgctcgaa gactgtgcaa acctttgtcc caagccagtg 300
cagtagttt acccaatctc ctacatggac ctattgcagc acctacacca ccactagc 358

<210> 3601
<211> 319
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-C4

<400> 3601

aggaacgttt tgtgggtggt tggcgctggg acgacgttgg aaatgtccat tccactcaac 60
ctttgtacaa ccaaagaaat acctatctt caataaacaa gttttccctc aaaaaaaaaa 120
aaaaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa agggaggaag 180
aacaagga ataaaaacta aaaataagcg tgaaagaaaa gaaaaaaaaa gggggggagg 240
gtcaaaagga ttcaagtcaa gggacggggg aatagaacgt caaagaccgg gaaaagggtg 300
acgtaaatca atttaaggg 319

<210> 3602
<211> 267
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-C7

<400> 3602

agaagctgaa ggatgccttg cggttcttgt ggtcggttt ctagttgtgc ttgtggagaa 60
aagtgtccgt gcgctacgaa gcattgtaat tgtggtgacc aaaattgtcg ctgtggtaca 120
aatgttagtg gtttgagtgc tgaaacctcc aagtgttg accgttgtca aggaaagact 180
tgtggttgca cgcgttgccc atgtgaagca gctagtaact agaagaagta ttgccgttt 240
taatataaaag ataatttgagt ttgtaag 267

<210> 3603

<211> 341

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-C8

<400> 3603

agcccaagcg tccgattctg acaggacccc gaatatcctt ccgtaaaag agccaattcg 60
tggaaatctt cagatttcaa ctcatgcggt gtatttccca gatgcaactg aaacattcgt 120
tctcgtgcgt gaacatttgg tagatgaata taaatacgtc tttcaaattct tcttcggata 180
agcaatattc aaaggaagat gagaagaaaa gttggatta aatgccggag atattgttt 240
aattggcttg agatactatc aagacgaaga aaaccgatat gagactagcg tataatccac 300
atgaagctag agcattgaag tctcaatgag aaattccaga c 341

<210> 3604

<211> 231

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-D2

<400> 3604

agtggagagg ctctattgtt tatttcgtct gctcaatgct tgcaaagaaa agaaaccgag 60
tccacctatg cctgttgact atattcggtt taaggattcc gagaatagag gaccactagg 120
tcatataacct agaagaattc gcaagtattc cataacaggt tctccttattg gaagtgtatag 180
aaagaaaaact tggaaaaatg gcaatggaca ataaaacgtc gttgcgattg t 231

<210> 3605

<211> 404

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-072-Q1-E1-D4

<400> 3605

agcggacgca tgggtcgga ggaagaggaa gcagatttc gagggattt tgactcggtt 60
gctattccaa agaccaccgt gaacaaagtg gctacagaag tacttgccaa tgccggcg 120
catcttcgt ccgatgccaa agaactattt gttgggtttt gttctgaatt cgtgcaactt 180
gttagttccc acgccaacga attgtgtgaa aaggaaaaca aaaaggat 60 ttctcccgaa 240
cacatttgc agtcgttggaa agaactgggg tttggagatt attgccaaga agtcaa 300
gtgtatgaag aattcttggaa aattgaaaag gtaagtangg aatatacgt ggtgggtgt 360
gtgggtgggtg tttgtggaga gagagagac tgacggactg tgat 404

<210> 3606

<211> 398

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-D6

<400> 3606

ggggaatcga caagttggaa gaaatgcaag gccttactgc aaaaaaggc atcggagtga 60
gtgaataagt gagtattgct gatgaaacgc cgttattttt cgcaaaactt tgattctcg 120
ctcattttt gttcgtctcc taataaagag agttcatcct ctgagagttt ttccaaagtt 180
gcctctaata ttcttggAAC ttgcaacata ttttgtcat attcggaaat agtatggc 240
cttgacgttg cttctttcg cttttccaa attggcagcc acgaggatgc cttgtcagac 300
gtagcgtttgc gtcaaactgc tgcagcaatc agttgttcat atgacggtaa agtgaatatt 360
tgggatagtc gttcacccca tttccgctca gttcaaag 398

<210> 3607

<211> 387

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-E3

<400> 3607

aggaaaagaa gagaaaagcc gtactgaaga ccgacacagg tactcgagga gaaaggagac 60
ccaaattaag gtgagagaat ggacgataag gaactaggca aaaggatatg gatatctgcgg 120
tagaacatat gaaagaagca gcaccgactg tttagcaaaa acacagcact ctgcagaaaa 180
gagaaaatgt aaagtataga gtgtcgccc tgccaaatag tagagaagaa atcgatgaaa 240
gtgaaagcga gtaaaagatg aggtatagag aatggcggtc ctaacagtaa ggatccaaag 300
gtagcgaagt aaatagacgt ttgaaaggcg tccagtatga aaggagaaac gagtgttagca 360
ctgtctagtc gtccaaactca gcgaaac 387

<210> 3608

<211> 398

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-E4

<400> 3608

agcacacgca tcggaaaaaa gacggatgac tcgaccacaa gttttgttcc ttccatatca 60
aaagaccaaa tcacgacgag tatttctgaa gcgataagat atgaaaagga atatgttggt 120
tttacttggc agaatttata caaactgttt tttgatgctt atcctttgtt gcacccctgtg 180
cctttgatag atatcattca ttttgctcat ccatccaata gcacaattct gttatccgat 240
gctcaatatt ctgcattccg ggaacaatta aaagcgatgg gagtgtcgaa taatttgagc 300
cacatatgag aaaagaagaa agaaaagaat actcgatttgg ttgctgttgg tttgttgcac 360
aactgtaaag tatttcatac gagaagagga gactgtat 398

<210> 3609

<211> 356

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-E8

<400> 3609

agccccacgca tcggcgacg cgtgggtgcg ttcttcgtt ggcccaaga acattcccat 60
tgtcttttag atggcgacaa actgggtgtgg ttccttcata ccaactacac atcggctttg 120
agagattggg gtcagttac ggcagaagaa accacgcagt tgcgtcactt gttgtacttt 180

ttagaagaca ttgtgcactc ctaattcct cagaaatggg atgccaacaa ccacaatata 240
ataccacacc tttttttttt attcaaaaaga tacaaccatg tcgctcgttt ttgttgtttt 300
catctccctcc tcctccttgc tgatataaaa aggcatctac gcagtcgccc tcttcc 356

<210> 3610
<211> 335
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-F4

<400> 3610

ccagaaacaa aatttttgc gttgtgtaac cgtagcctga ccgttttttgc ttctttgtta 60
aagtttttgt tcttgaatgt gcttctgtaa atgtcttcag gtgcagttat tggcgggttc 120
gcagcagctt ttggaactgc ttccggcttta ggagttgttag gaattatcgta tcatgtgtgt 180
cagtatcaac ccaacgctag aatgcgaata ttggaacgta gaagaagctt tattgagaga 240
gctagacaaa gacaaagtac gtttccacca ggtcaagaga gcaaagctgt tgatttgaa 300
gagattgaat gttgctgtcc acagttgaag tattt 335

<210> 3611
<211> 218
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-G8

<400> 3611

ggctcgaccc acacgtacgg atgaacaagt aagtgttgaa tatttcactt tgaatatattt 60
atatataacgc gtgttatatgg actgaatggg cgatatacgac tcaatttatata acaaggaatc 120
aaagtttata tagcttatataat gaatgaactt gtcaatttgct agactctttt cccgctataat 180
tccactctaa taatataaaa ggataaaagtt gttcttgg 218

<210> 3612
<211> 406
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-H2

<400> 3612

ccatcgata ctcgactcga tcgttgcAAC gcatattgca aagcgacatg gacaacagta 60
gcagttactc ccgaaccaca catacaaATC acatttcttCTC tatctaccAC cccatgacGT 120
tgaaatattt gtttcaactc ttctttatCC agtataCTt ggccatCTtG agttAGcaAC 180
tctacAAACg ggatattgat agctgtgtCC acgtgaccAC taggaACTCC tgctcgTggC 240
tctggTTctG ttccatgAAA acgaccAGAA gaacgAGCAT ccaatattAC acaatCTtT 300
ggagactgGA cataCTtT tactAGcaAC tgatcgGCAA caaaACTgtGG ttgatATcgT 360
ggcacAAAGt cttgttggTC tcggatggCA tccaactatt atcAtC 406

<210> 3613

<211> 401

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-H5

<400> 3613

aggaagagTC gggAAatATCT ggcttGAATg agtcaAAAGC attgtctCCA gaaggCttt 60
caagaAGATT gaaaAGTATA ctggatGAAT atcattCTtT gaaggATTCA aaggaAGCAG 120
tggAAAGTCT aaaggAAATA cctcaAGCCA acttggAAAT gtttGtttAT cagtttattC 180
aggTTGcATT gggAAAGTAGA acagccGTGA gaaACGATGC tgtcttTTG ttcacgCTTG 240
caAAAGATAT tATCACCCCCA gagATTGTGA AAAGCGGATT tgtatcAGTC atAGAAATGT 300
tggatgatCT cgatATAGAC gatcctCATG caAGCGATT tggatGttCC ctTgtgggtC 360
gtgcagCTGC tttgggcatG cttactgatC ccagtcaAGA t 401

<210> 3614

<211> 373

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-H8

<400> 3614

agcggacgCG tgggcaACTT tttaatttGT tgGAATGCAG aggAGAACTG gtcttAAAGA 60
acgttGAGGA tttgaaaaAT cttagcatCG aaATcaACGT tagttccGT gatgatcaAC 120

ctctgttgcc ccttagtggc ttgaggaatt cgggagggtga aaagatggtg tcaattatgc 180
tttatttatt ctcgatgcag cagtcgatga aggctcctt cacccttgtt gatgaaatga 240
accagggaat ggaccctact tttgagagga agattgttc cgtcatgatt agtgatgcac 300
gacattccac aagttctcaa gtgttctca tttccccaa attgctcact gatctagagt 360
ttggaagaga aac 373

<210> 3615
<211> 464
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-A1

<400> 3615

ctggcgtacg gtcggattc cgggtcgacc acgcgtccgg gacaattta gccttctttt 60
ggcacccgtt tttgtgggtt tcactcgtgt gtttgtctt tttaaaactc gaagactatt 120
tatttcttgt tatgttttag aggtgtttct acagtgtgtt tttggaatttgcgtacacca 180
tgcttggtgg ttggtaatg gctccagtga caaaaaaggt tgtcaacttc ccaccattcg 240
ctacagctcc aaccaccaat ctgtatacac atacatatgc ataaccacat atgtactaca 300
cagccgtggt gtaaaaaacg ataattcgaa tggttgcacaa ggcttgatttgcgtcaaaag 360
actagtgaac gtgttagaga aggtcaacttgc gaaagggggc cactccctg tgtaaatgtt 420
ccactagtaa ctaactaatt cctcttgcag agatttcacg tttg 464

<210> 3616
<211> 426
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-A2

<400> 3616

ggtcgacgca cgcgtccgcc cacgagtcgg ataggatcta cggtatatcg tttttatgaa 60
gcagtgacgc actatggaga agcactcaag gcactagtga atgaaaaagt gtggagatgg 120
aatcatgtct gctatcgata tgtatgtatc tgtatgtataaa ataaaaggaa ggcattggaga 180
agaccgaatt gtggtaaaat tgaatggcaa gtttttacctt caagtagaag gcaaaggcaga 240

agatgacacc tcttctttgt cctcttgaag atattcgta tggaagaaga tatcgagga 300
tggcgagttg gctattctct aatgtggagg gattatgtgt gtagagagag aaaagagagt 360
ggtggagaat gactcctttt tttgtgagtg ttgtcatgtg aaaaatacat ttttatgatt 420
ggcaaa 426

<210> 3617
<211> 390
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-A4

<400> 3617

gggtcgacgc acgcgtccgt gatgaataag tacattgaga agtatcgaaa gtattatagt 60
ctggcacgag tgggttttc gttggaaaaa ttttggctta aatagttcat ttgaggtatg 120
tcgcctgagt gagttaaagca ggctcgatcgaa agacttggaaa catcgatccc tgaattccctc 180
ttctacagaa gaaagacaga aactgcggga acgaatcaaa atacttaaag acaaacatag 240
ctccaagtgg aatgtaggca ctgtctcgat acaacactta gaaaggcagt tgatataatta 300
caaaaataaa ttgaggaact tgtaaaaaaaaaaaaaaa aaaaaaaaaaag aaaaaaaaaaaga 360
aaaaaaaaagag aaaggaggag gagggagaaa 390

<210> 3618
<211> 146
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-B1

<400> 3618

ggtcgaccga cgctgtccggc aggtagagt agcgaaacaa gagaaggaa gtaaaaggt 60
agaaagagga aaggttacg agagaaggaa gtagaaagaa gagagtgtaa ggcggcgtca 120
taatagaaat ccgaaaggag tagaag 146

<210> 3619
<211> 401
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-B2

<400> 3619

ccacgcgtcc gaattttgtc gtttgtgtt ccaaagccaac aagcatttag cacaacaata 60
tcgatatgtc aagtggctgg aataactaatg tggaacggaa ggtaatggga atgctgggc 120
tggacaagg aagaacaagg ataagaagac cagtggagaa cttgcaaaag atagttaaa 180
gggtttggga atggcagcct tgcagcggg taagctggtt tatcgccgtg gcaagtggtg 240
tgtggataag gtgaaaggcg ccattgacga ccacaagtca aaaggaagta agagtggcgg 300
tggtgaaat tcacgttatt ctgcgttaaa cgtataact tggatagaaa cagaacgaga 360
cggttttta tatttgttgc gctggataaa taatttctg t 401

<210> 3620
<211> 448
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-C3

<400> 3620

ggtcgacgca cgcgtccgcc cacgcattcg ctttgggtat ttcatggactt tcaagttgg 60
attttccaaa cactgaactt ttataggat tgcacagaa agagattatc tttagaaagat 120
agtaacttttggacgctcat ccaagacaac ttatgtaaag gatatcatga cgtctgcca 180
tgatctaatt agtgtcaacc ctgcgttcc tcttagcgaa tgtatggaaa taatgactca 240
gaaaagaatt cgtcacattc cggtaataga tagtgaaggc aatgtgaagg gaatggatc 300
cataggagat atcgtagat aacttagtcga agaacaacgca catgaagcga agaaactgaa 360
tgaatacatt cagggactt attaagatgg gctccttcga ggcttgaagt gctttgtt 420
atttgtgcac agaataaaca tttgtgtg 448

<210> 3621
<211> 401
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-C4

<400> 3621

gggtcgacgc acgcgtccgc ccacgcgtcc gcccacgcgt ccgaccagac gagaaagtta 60
ccttttgtt cctgttcatc atttcgatca aggagactgg tgtctttaa tagcaagtgt 120
gttttctgtt gttgtgacaa cagttattgg aaggggcaag ttggagctt gtgacaggtg 180
tgctggactg ggtggagctc agtgtttgt ttgcaagggt accggagtt tctatttgg 240
agagggtaca aaaaagtgtt aagcttggtt ttaacagact tgctactgtg agggtccccg 300
taaaggaact ggatattcta aatgtggtt ttaacagact tgctactgtg agggtccccg 360
aaacaaataa aacaacgcta acccgataag ggtcatccca g 401

<210> 3622
<211> 323
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-D2

<400> 3622

gtcggaaatta acgggtcgac gcacgcgtcc gcccacgcag tcggcaaaca actggaagca 60
gttttatatt ccataatgtc ctctgagttg gatgaagatg accatcccga gcgacaaata 120
atcgatcta ttagcttagc agatgcagat gaatgacagg gtaagagaca taatgctcg 180
ttctcccttg caaattcctt tatacaggc agaagctt atacatctcg 240
tcttgcgcg aaccaggaag aagaacctaa agaaaagata aagctaagaa cggcgatgtc 300
ttcctagaac aagagtattt tgg 323

<210> 3623
<211> 467
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-D3

<400> 3623

gcggccggtc cgaaattatc gggtcgacgc acgcgtccgc gttgattaa gaaaactgg 60
ggaactgttc aacttgcttc gttactaaat tcgttcttg ctgaggttt tgaagtctcg 120
cctgtgtacg atgccaggg aagatagtg aactttgagg tgacagactc tcatggcata 180
tctttcgag accaatatc tattttgtat gtgactccat tgacaagaga ggacgcgaaa 240

gcagacacgctccagatttgttaggtttcttacttttacaactttccatggttacatg 300
cagtcttata tagatgttagg gcgaaacgta cgaaggcaggc gcagctcacc aagtcgaagt 360
cctgtcaaac ggataaaaatc tgaaggaagt tgagagttga atgtcgatgt atagacggcc 420
actagcggcc acgacggtcc gcagtctcgt taagaaataa ctcacta 467

<210> 3624

<211> 363

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-D9

<400> 3624

ggaacacgga ggacgacagt agcgatggga ttgttagta gactgttgt gaaaccgagt 60
cgtgtaccgc aaagagtcgt agagttcaa aagcgcaagg cggaaggcta cttaacatac 120
aacgcggga agtacgaccg atacatcaac acacctattt acctgttgt gtcccttcacc 180
ggtcttatg ccttattga cggttgtctt tggcggcag gaaagaagga aagtcaatcg 240
tgaatagcgt ttttgcct tgtggacagt ctatgaact agtgattcgt ttgttctgcc 300
agtttagtt tcttgaatg aaagttcct ttttcctt gaaaaaaaaaaaaat 360
gaa 363

<210> 3625

<211> 427

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-E2

<400> 3625

gggtcgacca cgcgtccggc attacatcct ggtatgactg tgctggactt ggaggaagca 60
aagctttgtt aggctcctca atttgttgc gcaaatgacc ctgtcaatct tgctggatgt 120
gtcgctgcaa atatttacg tggtgatgtt caacagacgc attggcttga gcatgaagag 180
tggtaaacg tgacagtgac aaacatagtt aaagatgagg aatgtatccc aatcgatgtt 240
aagaatcctg aggaagtaca gtccgaacct gtaccgaatg cacagaatat tccacttcgt 300
gatattcgaa gtcagttga taagttaccg aaagaaaacg aaattgctgt gttttgccgc 360

tcggggcata gttcttattt ggcataccaga atgttaagtc agctgggttt tcataatgaaa 420

aatattt 427

<210> 3626

<211> 449

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-E4

<400> 3626

gggtcgacgc acgcgtccgc atgaatggaa tggcgagcag tcctgcttt caaaccaatg 60

tcctcttcac acagcggttg aacagtgtca gaacttaac agtaaacaga aagtcttcac 120

catcttcggc ttttacttgt acctccgcac agactcctgc tactggaact atcaaggact 180

ttgtgaccaa aagagctatt tataccctt gctattactt tagtgagcta cacgacgaat 240

tttctaagag atggctcctt caattcgaaa attttggta ccaaggtgaa cttagagaag 300

gttcttatgc ttatgggtt cgactgtta ggtcgccat gcataatggaa gaaatttcaa 360

gtggacctga ccctcgctat cactcctata gtcgcacttt tgaaatacaa ataagttcat 420

cctctattgc aattcggtt atgagagta 449

<210> 3627

<211> 439

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-F1

<400> 3627

ggtccgaaat tcacgggtcg acgcacgcgt ccgagaatat gaacctctt accgagactt 60

tggtttgggt acaactattt ggtcacctt ggcttgggt atcttatctg gaaagtacag 120

tggaaagaat attccagaag gttcccgact gtcactcgag aaatacaaag gattgaagga 180

agttagttt acggaacgag agtggcagat tgagaagacc gatcagttga agccacttgc 240

tcaagaactt ggttgtactg tagctcagtt agcgattgct tgggtgcag cgaatcccc 300

tgtatctacc ttgattactg gagccacaaa gttgcagcaa ctagaagaga atttcaaggc 360

aatggatatt gttcccaagt tgacaccgga agtaatgaaa cgaatcgacg acattgcaca 420

gaccaaacc a gactacaat

<210> 3628

<211> 444

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-F10

<400> 3628

ggtacctagt ctagaattcc gggccgaccc acgcgtccaa aaaaaaaaaa caagaaaaaa 60
 aaaaaaaaaa acacttttag agataatgta atgaaattag tatgtccatg gcgttggct 120
 ccaataacctg taataggtat tcaatgtctt ttctagccca tatggatatg ttctcgtctt 180
 cgtactttgc gatacgagcc gaacgatcta ctactaacta gtgtcttgtt attcgttctt 240
 ttgattctga atgtcggtgt ctttataata atgtgaagta atgcgatgca taacgcagat 300
 gcaaccattt ctttggaaagc gaatggattt aaacccctt tactggtaat gacttacacc 360
 atacaaatgg gatttgatcg acgaggggaa atgaactgct aagaattgct gcatatcatc 420
 aaggcccaag atccggagat tttt 444

<210> 3629

<211> 445

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-F3

<400> 3629

cggccgtcc ggaattcacg ggtcgacgca cgctccgca acatactca ccagataatc 60
 cagtggtttt ctttgatgtc agtatacgctg accatccggg gggagaata aagatggAAC 120
 ttttgcga tattgttcca aagactgcag agaactttag gcagtttgt actggtaat 180
 atagaaagga tggtattccc gttggttaca aaggctgttag ttttcataga gtaataaagg 240
 actacatcat tcaaggaggg gactttgtga atggagacgg cacaggttcc ttgagtattt 300
 atggctata ttttccagac gagaatttca tcttgagtca ttccggtcca ggagtattat 360
 ctatggccaa tacaggaccc aataccaacg gcaatcaatt ctttattact tgtacgtcg 420
 gtgagtgggtt ggacggtaca catgt 445

<210> 3630
<211> 442
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-G10

<400> 3630

ggtaccggtc aggaattccc gggccgaccc acgcgtccac ccacgcgtcc gcccacgcgt 60
ccgcttggca acgcaaagaa tttaaaagta tgacaaagcg acagcttcat aaaaatacgc 120
ttgaacatct taaacaacat cgaaccatgt tccctgccat cgaagcaagg ttccctgattg 180
taaagacacg agtaaactca gaatcgagtg tttttggac aacaaaaagt tctactgagc 240
catcaaagca ttcaaaacca aaagtttggataactttcc tgttagagacc ctatgaattc 300
ctggcaggtg ctgttcaaaa atgtaataga acagttggc attgaaacct tatcatctt 360
tagacataag catagaaaagg ttgcgagtga gtcgacatac taaattcaca ggaaatttg 420
gacgtctcaa gttcaaactg tc 442

<210> 3631
<211> 441
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-G4

<400> 3631

ggtcgacgca cgcgccgaa ttttggcc ttttggcgtc atgtcgaaga agaaaggcct 60
ctccttgac gataaaagaa ctagaatgtt ggaaatattc acagagtcaa aaacctttt 120
caactctcaag gaattggaga aagtagctcc aaagcaaaag ggcatagtgt taccctccgt 180
gaaggaagtt ctccaaagtc ttgtcgatga cgacgttgta tccagtgaca aatgtggAAC 240
gcaaacagtt tactggtgcc ttccaagcca ggctgtacaa aagaaacgta gcagaattgc 300
ttccttaact gaaaaattac aatcaaatac cgaccagaag caacagttat tagaaaaacg 360
cgaagaactt cgcaactgtc accaagatac tgaggagagg acacaattaa ttgagcagat 420
aacgcactt gaatctcaa t 441

<210> 3632
<211> 432
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-H12

<400> 3632

cccggtcga cccacgacag tcaggatgct cgaacagcta gatatgcgac gtgatgtca 60
agagattttt cgtatgactc cgcatataaa gcaggtcatg atgttctcg 120
gaaggaaatt cgaagtgtct gtaaaaagtt tctatccaat cctatggaag tttatgtgga 180
tgatgaagct aagctcactc ttcacggttt gttgcaatat tacttgaat tggaaagagca 240
tgagaagaat agaaaattga tggatctgct agacacacta gagtttaacc aagttgtat 300
ttttgtcaag tctgtcaac gagccaatgc gttgaataag cttttgggg 360
tccgtccatt gcaattcata gtagcatgcc acagtcggaa cgtatctcaa gatatcaa 420
gtttaaagat tt 432

<210> 3633
<211> 466
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-H4

<400> 3633

taccggaccg gacttctcg 60
gtcgacccac gcgttcaaga tatcgaaatc tcggattctc
acttctcgat tgccctcat tggctttac agcgcagttg cctgtatctt aacaggatgc 120
attggcgaat catcaaata 180
tag tttgcaaaa aatgttcgtg tcttactccg tacctgcaag
aaacttaccg gctttggcac gtaactttc caatgtctgt ctctcgagga gtggctcgag 240
agggggatgt ttacgaaatg tgaaagttt caaccacaaa cgacctgcaa ggttgttata 300
tacgaaaatg agaggaggcg accatgaaac gagagaactt agtcgtccta tgcgtacact 360
tgattccgct ttgcacgaac ttttagctt tgccacgat ccctggtcca tgtttcgctc 420
tccatggagt ctgtcgccca taagtatggc agtagacacg tggatg 466

<210> 3634
<211> 461

<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-001-Q1-E1-H7
<400> 3634

taccggacctt gtagttccgg gtcgccccac gcgtccgcga gactggtaag catgacgtct 60
atttgggagg catccaaaga acgcgttat cattacaaaa acacagttcc ttaccactta 120
aaggttatcg acgctttctt cttgtatgtc ttttctactg ctgccatcca gtttgtttac 180
gtcttggatcg ttgggacctt tccttcaac gctttcttgg cgggtttctt ctcgtgtgct 240
ggagtttttg tggtgacagg taaataatac agggatacta tatagctgctg gttttttccc 300
tcacgttatt tatcttagtgg ccttgcgcattt gcaagtgaat ccgcggaaatc agaactcaggc 360
caatcgatgg gaaaaagtga accccttaccg tgcttatgtt gaatggctgt tttgttaactt 420
gattttgcattt attgctgtta tcaactttaa tggatgagag a 461

<210> 3635
<211> 455
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-H9

<400> 3635

caggtaccga gtctagaatt cccgggccga cccacgcgtc cacaatacgc tataccaagg 60
ggaagatctt ctttcgaga ttgagaaaaat gccagatatac tacaccaaata ttcgagaaag 120
tgtggaagct ggtggaaaga taagagaacc gttggaaactt agtgaaggat ttccacccag 180
accacgttgt gaacctggtg aaattccaac gcttactgac cttggacttag atgcattcccc 240
cgagcgagta cctgggtgagt cgaatcctcg tagcatacat ggatttagac gaggagaatc 300
ggagtcgctg aaaagaatgg aagattatct ttctgaaatg agaagtaccg aaatcaattc 360
taccaacgca ggagcgtatt tgggtgctga ttctcttgc aagatttcgc cttggcttgc 420
gttqqqatgtt attagtccta ggaagatata tcacg 455

<210> 3636
<211> 435
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-A4

<400> 3636

cgtaccggtc tagaattccc gggcccaacc aagcctccag gttcccgaaag gaaatttttt 60
caacatcggg aatttcgaaa aagttgggtt tccattaagg aaactttgg aaggccttga 120
gaagtccttg gtacagattt cagcaaatgc cttatcggtt acaattctcc ccaaacgtat 180
ggtttgcaag tggagaatgg tattccttatt accacatgga ttgacgatag acaagataga 240
gaactgttaa atctaataacc ttttttgaag cagcttctg tctgtgacga tgttcggcca 300
attttgagta cgcgacttca tcttgctgat ctgcgttgcac gttatcgcaa attgatgtat 360
ttgaactcgt tcgatacatt ccacatggac gatgagaaag atatgtgtgt ggccgtgacc 420
tgataactttt tcggt 435

<210> 3637

<211> 213

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-B1

<400> 3637

aggaggcaaa tacgggaaag cagtaaaaga agaaagagaa aggaaaaaac tgagtatcag 60
gaagaaaaaga gggagtagat gagaaagaa agatcaagga agtaagagta agagaaggag 120
taatgtgaat gaaagcagga aagtatttga agaagagagt gtaaagcgcg tacctttgc 180
ataatgtccc agcgagtgaa agaggaagca aaa 213

<210> 3638

<211> 418

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-002-Q1-E1-B10

<400> 3638

gacccacgacg tccacccacg cgtccgcgtt aatattgtgg cggggggccc ttgggaaccc 60
ttaaaataat tacacaaact ggccgtaac cctaaactgg aaacacaatg gaccttggaa 120

taaaaccacc aaaggcttcc ccggaaggca cggccaaaag tagcaccacc gaagtaacta 180
taaaagctgc ggaaattgt aacttgggt acatttgcc tggcgccc caaattggac 240
ttgaaacaaa tcgccattaa agcaagaaat gcggaatata acccaaagcg tttcaagct 300
gtcatcatgc gagtaagaaa gcccacaaca accgccccta tattnatgtc gggcaacatt 360
gtggttacgg nggcggaaag cgaagaagaa tccaagcgaa cgccaaaaa gtttgtgt 418

<210> 3639
<211> 450
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-002-Q1-E1-B11

<400> 3639

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cggtcttct tcttctgggt cttaaaaggc ttcaagtgtc tgtctctcaa agaaaagata 120
tgttccctt atactagttt ctggaaattt gttgcacac cttcatgtga taacgactcc 180
tcgcaagacc tctcggtc tcttagggca acgaaagcga caattgtctt tcacacatac 240
tatatctcct cgttggacga tgaacatctt tcaacgtttc tttcgcatca tccgtgcca 300
tgtgaaccaa ttattatctg gtatgaaagg accaagaaag ctgatcaaca aacagttgac 360
gatatgaaaa gtgacttggt gaaagtccgt caagctttag cagaagtagc agcaagtcag 420
aaacggctan aaaaacagcg tcaacaagca 450

<210> 3640
<211> 419
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-002-Q1-E1-B2

<400> 3640

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gattgcaaaa gccatgaaag aacatgaata gcgcattttt gaaaaggact gttttatgga 120
aacttcctca ggcttgggt acgggttggc agctggcgta acttatggtg tcatacacaa 180

ctttgatacc ggaaaaaagg aacatcctcg agcaataagc tttgagccgt tacagccatt 240
tggtgcacag gtttaacagg ccacccctca agtttcatgg tgctgccaat cgcttcatt 300
attctccaca acgctgcctc caccggagcg ctggttcttg caggtacctt tgtcgttagca 360
catgctccat agcaagatac ttttgtaaat gatttggatc cctgtggatt agaacgtat 419

<210> 3641

<211> 431

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-B7

<400> 3641

taccgtatta ggaattcccg gctcgaccca cgcgtacgga caagagcaac aacaacacag 60
tggagggaca aatattcgta gaatggaaca aatattgttg gagagtcaaa acaaagcgct 120
tggacaggtg aaaaagggag ccttgtctat aaggtcggtt aaccacgtt ccttttctgt 180
acccgaacca gtgaagacgg gcaagttctt ttgcgagatt cttggcttc gagtggttcg 240
acgacccaac ttcaattttt acggtatatg gttgtacagt tatggtattc aaatacacct 300
tatctaagg t gctgctctcg aaagacccaa tatcttgaaa ccatgcacag accatatatc 360
tttcgaagcg gatgacctca caagtataca gaatatattt gacactttaa atattccgt 420
tcttttggag t 431

<210> 3642

<211> 342

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-002-Q1-E1-C2

<400> 3642

accggtcagt aattcncggg tccacccacg cgtcagaatt catttggcag acgctgttcc 60
ttggatgat gactttactt gttttggca aggctctatt caatttgcga gatatttcag 120
gtttttttt ggctccacac ttgttgtacg gtattttagg aaatagtgcg agtcctgggt 180
tagcgaatt gaggaaacat cttctatgag gtattggctc attacgtgga tattctacgg 240
atgcgctaag tactgctata tgttccttac aatacgctgt ggaactgcgt tttcaaccat 300

gtcgacgatg ttctcggcac ttgaatttat gattgtttgg gt

342

<210> 3643
<211> 217
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-C7

<400> 3643

gaccacgcg taagcgaacc tggtagacgc tgctgggtga gggtgggtga ttctgttaacc 60
actgcttagca ggcggaatag tatagtagat gtttctcaac atagacctgg ctttacacgg 120
aaaccttatac acctatggat tcggattaag agtttcccaa ctggtttcga gtacatgtat 180
aacgtctcag tgagctcgaa tacacaatga gggtcgt 217

<210> 3644
<211> 339
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-002-Q1-E1-C8

<400> 3644

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aggatccgag ttcccttttgcataagccgct tttaaagtgg aagccgttgg aaaaggcgga 120
agaagaaaatc ctttcaacg ataggttgcg tcttgtaaaca gactgcatttgc 180
aactggtttc gtgatctata aatgactta ccgtttctc tatggccctc ctgagcgatg 240
aaactgttag tttaatata tgcgtttaga aaactttgtg tggataaaag attggctcta 300
gttgcgtact tgagggtttt ctcgacgaca gaaaanann 339

<210> 3645
<211> 391
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-D6

<400> 3645

taccggtcta gaattcccg gccgaccac gcgtcaggct gcagtcaagt ggatgggttt 60
tcagttcaac ttgatcaacg aaccatccaa tgtcttacaa gttgttaaac atttacagcc 120
acgtcagctt gttccttga tgaataatga cttgaatatc agtggaaatac tttcttatgt 180
catcgccctcc aaaggttagtt tagaagagtt tgaacgttcg attcgtgctt ctgggtggag 240
aacccaagta ctcaagccag tgataggaga accctgtcga ttactgaaag aagaaaagttc 300
atatcgagtt gttggagcaa ctgtctgtcc atctcctcag gaacaaactt aaaggctgaa 360
aataaaaaccc acggtctctg ctatggaaaa c 391

<210> 3646
<211> 399
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-E1

<400> 3646

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aaatatttgt acgcgatctt ctgggccac ctgggttaca gattgtggaa tcccaagaaaa 120
tggaaatgtt ctatttggaaa ccggaaagag aagacaagga agctatggaa gagggatctt 180
aaagtgcatt ccaatagaga ttgactcgat gaaccaatcg aagtcccatt tcataactcg 240
ataaggagat gattccacta ggaactgttc gaaggagact cgtaccatt ccctatatat 300
atatatattt accacacaca tatataaaa taaccataga ggatagatag gatattcgat 360
gtgattacct tgtaaaaatgc caacgctcct tcctgtcgc 399

<210> 3647
<211> 305
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-E4

<400> 3647

gtaccggtct agagattccc gggccaccc acgcgtccgc aagctgcgat tgcagtggca 60
aagaaaaggag ctaaggccaa cacgaaaaag ctcaagaacg aaaatttaaa gaataataac 120
gaacggttgggt ggtcaaaaaaa tcctggaaaa cgaccgggtt gggaaaacta tcaaaaaaaag 180

gtctgcaaac acgccccaaa cgtatcaaaa gagggcaaca tctgttttg aaatgttcaa 240
gaaaaagtag tagtagttcc tactcacgtg ttcttaaaat atacttaata aattcaacag 300
ttgcc 305

<210> 3648
<211> 432
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-002-Q1-E1-E6
<400> 3648
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ccaaatttgt gcaacggctt caagaagtct tttgtcaaag gaatctaaag gggtttgccg 120
atatttgcac gctacgaaag tcttcaggc gtctaattgtg atgtgccgag atgccttaa 180
cagtgcgtt gatgaagaac ttgaacgaga cgaaagagtt tgtattattg gagaagaagt 240
aggacagtac caacgcgcct acatagttac tcgtggcttg tatgaaaaat atggttcaag 300
gagaatagtt gatactccta tatccagat gggttcacc gggtggctg taggagctgc 360
attcaacgga ctaagacctg tttgtgagtc tatgacctta aactttgcaa tgcaggcgat 420
cgaccagatc at 432

<210> 3649
<211> 454
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-002-Q1-E1-E9
<400> 3649
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agcagtacgg gacggaaaga ccccataatt cttgactaga taggttaag gaggagagag 120
aatcatgaag tacaggacgt gggtaagag atgaaagacc actgcatgag gataaggaat 180
ctaactgagt aaggaaaata agcttaagct agttggctg gggaaataaa gcctaagaaa 240
gagtaaatta ggcaagcaaa ggcattgagag aagtataata gcacaaggcat gcttgaagaa 300
aaagaaaagag atttcagaaaa ggaaagaaaa gtcagctata gagaacaggt gaatgagaac 360

tcaaaaagag gagagcacccg aacgatcgaa gaagaaaactt tgggggttaac aggttaatgt 420
ggtgttagag aacgtatcaa gcaccacgat tgac 454

<210> 3650
<211> 420
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-G12

<400> 3650

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tttgtgataact ttatcggagt tgtactttac gtcaaatcgt ctaactgaac tgtcccacaa 120
gttgaagaaa gctataagga agggtgctgg tggagatgaa tattttgaag agttgtttt 180
gggtttgtgt ttttaattctc gtccagacat ccagacttat tcacgagtga gcagtcggac 240
tatctatttt cagtccaaatg ttttatatcg ttttgatggg aagtgtttt atagacgtct 300
gtctagcata aagatgagct gctggataaa attcatcaga aattatcttgc gtttcgatta 360
tgcttacgta gatatgactg acggtagatg gatgttgcgtt cctatgcagg tttctgtttc 420

| | |
|-------|---------------------|
| <210> | 3651 |
| <211> | 356 |
| <212> | DNA |
| <213> | Cyanidium caldarium |

<223> Clone ID: LIB190-002-Q1-E1-G3

<400> 3651

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aagcacaaag ttgttttatt tattatttgg gcgtatgtatg gttcgccgg tctcggtcg 120
ctgatacgctg ctgcttgtga agaagctatg cgaacatgca ccaccaactg agccaaacta 180
tcaacgtgtc atttattttc tttaagata cattttgcga atagaaaata ttattttga 240
ggaatagcgt gtataattga atactgtta gattgccagt agaataaata cttgacgaat 300
tgatttgtggtaaaaaaaaaaaaaaaa aaaaaaaaaaaaaaaa aaaaagatca cacaaa 356

| | |
|-------|------|
| <210> | 3652 |
| <211> | 450 |

<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-002-Q1-E1-G9
<400> 3652

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gttttttagt tcttttagaa ctgttattga gaaacttggc gcaggtccca ttgagcgaaa 120
gtagcttc agtgcattcg agacagaaac tgaatattga ctactcaagg aaaggagttg 180
tcggaaattc ccagagtgtat tatcctcaag attcatgcag aggcgttcaa tttagccaaa 240
ctttctgttc attctgttagt tcgctgtacc aagagaatag agttcttaaa gagagaatcg 300
ctgagctcta agaagaaaaat tcttcttgc cgatcgaaat ttttgaaca ttgttttacc 360
aagaagtttt cttatcactt gcagcggctt gcattcgatc ttttgtgca tgtgtgacgt 420
tgttgtttaa gaactagttc cactgtactt 450

<210> 3653
<211> 341
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-002-Q1-E1-H2
<400> 3653

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gtgttttgcgttgtt gtccagtggt tccatggcgt ttcacttgcgtt acgagtgaag 120
cgtaaaggtc gtttcttgaa ctgcacttga agccaaggcg agtttaattt acgggagttg 180
gaaaccacgt tggtgcaaaa ttctttcag gtgggtattt agcatagttt gactaagggtt 240
tgaaggcagt tgtttaccga ggatcttttgcgttatgtatgatgtacaaaca attgcaacgg 300
ttgttttgcgtt aagaaataaa cattatcgat ttggaaagcac g 341

<210> 3654
<211> 259
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-002-Q1-E1-H6
<400> 3654

attatatatg tttttttttt tatggattc cgaattttta caatcaaggg aacccaaaaga 60
acgttagcaaa ccaaagaatc ttctgtcaaa agaatgtttg gagttccgg ttggaaaact 120
gagtcgtttt cccaaaaacg gaaactatgc cgaacgaata tgaactggat cccagttt 180
tttggaaagca atttggaaa accgaaacgc tgaagtcctt gaattggctg gaaacgcagc 240
tcgtaaaaac agatataca 259

<210> 3655

<211> 425

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-A12

<400> 3655

ggggccaccc acgcgtccga tatcaagaaa cctcggttgg aaaaatgcc aagaaataag 60
aatggtatcc actgtttcc tatccaaagt acccggtcat ctctcacag acctttctc 120
atagagggtt cctgcaagct acattcggtt gtgggtacaa cagtggctt tctactttgt 180
atatcttgtt ctgggtctt taccagcgat caatctctgg tattggaaagc ttggagatat 240
gtcgataaat attacgtcga tcaaagtatt catccttcgt gggtgcaact acgacaaaag 300
attattcgtc aagtcaacca caaaaatgc cacgcttga taagagagat gctatccaa 360
ttggatgatc cttataccag actattggaa coagaagaat atcaatcggtt gaaagcaacg 420
gtaac 425

<210> 3656

<211> 412

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-A4

<400> 3656

ttcacgggtc cacccacgctg tccggacttg aactttcgt gtatggatga cgaatcgac 60
tatccttggaa tgaaactagt gcaaactaac ttattacaca acagtgaagc agaagtatta 120
caaaggcg aacagaactt gctgaaagaa cgtgaatggt ttctggacaa gaattgtcgt 180
tctgtgtgg gagctatctt atctgttctt tctgtatcaa aaaattccag tgaacaacag 240

cgtgctgcc a atctgtttt gtcgttgtt acttgtaaa ctgaagtacg tttgagagaa 300
tcaatcgctg ctgtcgccaa tcaggatcct aaacgcaagc tgtttcaacc tttaattgca 360
ttccttgact aggacaaaacg ttcttagct tccacttgc ctcacatctt gt 412

<210> 3657
<211> 433
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-A5

<400> 3657

ccgggtccac ccacgcgtcc ggattttggc aatgaaatgc aaccaacaaa agacacaacg 60
cctgtcgaaa tatttcgtta cgatgcacct ttgaaataca acttgatcca gttattcaaa 120
gacctttatg attttcaaga gccttgtaga gataatatac cttggatgta ttttgtcaa 180
cgactggaac gactggcaga agactgtcgt tctccaatag aaagtgaata ttttaggtct 240
ctcatgaccg tttcagact acatcacttt gtcaatttac aacacatttc tttggctgtt 300
ttgaaattat ctcgttggct ttcttccaca cataatagaa aggaaatgag tgaccgcagc 360
aatgcgagca atgagaacccg cttttgtggat attttagaa aatattttatg tcaagtaacg 420
agcgctttgt ttt 433

<210> 3658
<211> 402
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-A6

<400> 3658

ccgggtccca cccacgcgtc cgcaaacgcg tccgcccacg cgtccggag catggattg 60
aatttatggg atatcgaatt ctatatgcta cctacgtaaa ctccaaggat cttttgactt 120
ccattctctc cgagttgaac cgaacagaaa gaaacttgcg ggaagtcgt catgctaccc 180
aagtttggaa tgcagttgca gtgaacaact ggacgcgggtt cttcgtgctg tatgcacaat 240
gtcctcacct cggcttctat ttaatggata agataaagga tagaatacga cagattgctg 300
tcaaccattt gcgaaaagcg tttaaagttt acaatatcga cctcgaattt ctctgcagaa 360

attttggatt cgagaatact gcagaatgta aagaattttt cg 402

<210> 3659
<211> 465
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-A7

<400> 3659

attcccggtt ccacccacgc gtccgcatac cacgaacaga tgtctgtcgg tgagattact 60
agttctgcat ttgagccttc gaatatgatg gccaaatgct atccaagaca cggaaaatata 120
atggcttgct gttaatgta ccgtggtgac gtcgttccaa aggacgtgaa tgcagctgtt 180
gcttctatca agacgaagcg tactattcaa ttttagact ggtgtccaac gggattcaag 240
tgcggtatca actatcaagc tccatctgtt atccctgact cagaattggc taaagttcaa 300
cgtgcagtct gcatgatttc caacagcact gccatctctg aagtcttgc cagaatttgat 360
cacaagtttg atcttatgta tgcaaagaga gcattgttc attggtagt tggagaagg 420
atgaaagaaa gtgaattttc cgaagcacgt gaggatcttccgct 465

<210> 3660
<211> 379
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-A8

<400> 3660

ttcccggttc cacccacgcg tccgcataag aattgaaagg acaagggttgt tgcgttccac 60
agtcagtc accgcgcgtt tctcagtttc gactacaaga cggtggctt cctaaagact 120
ttcgtaaac ttcatttca cgttAACGG gctgatgatg taaagttcct cacgcagaat 180
tacaagggtcg cttagtcgt ttttgcgc aaccacacag ttgtatccc agttacagat 240
ttggttcgga ttgtctctc cattcaagcg atctatctga tgcgtactta tcctctacaa 300
gagactttt cattcacgct cgtggaaatac ccttatacta tggcaatatt ggatcagcta 360
acgtattgtc tgatttgta 379

<210> 3661
<211> 428
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-B11

<400> 3661

cgggtccgaga ttcacggggc cacccacgcg tccggaaagta aatagacgtt taaaaggcgt 60
ccagttatgaa aggagaaaacg agtgttagcac tgtcttagtcg tccaactcag cgaaacagca 120
ataactgtga aaatgcagta aactagcagt aggacggaaa gacccataa ttcttgacta 180
gataggttta gggaggagag agaatcatga agtagaggag gtggggtaag agatgaaaga 240
ccactgcattg aggataagga atctaactga gtaaggaaaa taagcttaag ctatgttggc 300
tggggaaagta aagcctaaga aagagtaaat taggcaagca aaggcatgag agaagtataa 360
tagcagaagc atgcttgaag aaaaagaaag agatttcaga aaggaaagaa aagtcagcta 420
tagagaac 428

<210> 3662
<211> 440
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-B2

<400> 3662

ttcacgggtc gaccgacgcg tccgcccacg cgtccggcag aaccagcggt tgatctcggt 60
ggaaagagag tccaagtctt cattagaatt ggaacttagca gaggagcaag tagaaaagaa 120
acagttcgaa tgtttcttac agcatattcg attggaaagg ttggaaaaaa atgtaatatt 180
tatagaaaaat gagtggagta gtggtcttat tagtatgcag tgatagaagt tgttggcacc 240
tttataaaaa gccctcagtt gggaaagaaag atcctggagg acggcctccg tgcgaatagc 300
cactgactcg ttgcggagcc aagcgcttag cgccgttaat actttgcgag ttcaagactc 360
tagagatatc tatgtcttgg tatagagcac agctcgcaact ctccatactg gatgcacaac 420
tagaactttc cttcggttcgc 440

<210> 3663
<211> 465

<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-003-Q1-E1-B6
<400> 3663

cgggtccacc cacgcgtccg cagacgcgtg ggttcatatg caagaaaacgg agtffffgct 60
tcatggaggc gatattcggt ggcttgagtc cgatgagaat gttccaccaa aacttttagt 120
tattcgtgaa ttgaatgcaa tcttagctca tcaaccttgg ttattgaaaa gtgagcactt 180
gcaaagacta gctcatccag ctccctctt ggggtgtcaa gtttcgtggt ctctaagtga 240
atgtgttttgc gctattctca tattnagcca ttttcactcg ttggcaggtt ttattgaagg 300
atgtggactt tgtccagata ttgatatgga tagcagagat tctcttgtac gtcttttatt 360
gacacgagaa caggatggcg gtggAACAGA agaagaggag atggcaacaa agacaaatga 420
tgctttacaa tcacctccat ccgaagtggaa agctactcga cagtt 465

<210> 3664
<211> 364
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-003-Q1-E1-B7
<400> 3664

aagctttcc ttatattctt tgtgcttgga caatgggtgc aaagactgct ctgagttgcc 60
tctttctctc tttccttatac gctgccgcag ttgcagccga cgtagttca gaggagagat 120
ggggatatgc tcagcaaacc caacaacagc aacagtgcac acaagtatgt aaacagtatg 180
catactatca gagtccagtc tgcaacttccg taaccacaca gagcccatac tggacccaat 240
gctcgaagac tgtgcaaacc tttgtcccaa gccagtgcag tacttatacc caatctccta 300
catggaccta ttgcagcann ctacacacca ctacgttacc atctcaatgc agcaaggccg 360
tgac 364

<210> 3665
<211> 389
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-003-Q1-E1-C10

<400> 3665

gggtccaccc acgcgtccga agaaatcgat gaaattgaaa ccaattaaaa aatgaggat 60
aaaaaatggc ggtccaaact gtaaggatca aaaggtacca aattaaataa actttgaaa 120
ggcttcaatt ataaaaggaa aaacgattgt aacactgtct agtccgtcca actcagcga 180
acagcaataa ctgtaaaaat gcagtaaact agcagtanga cgaaaaagaac ccataattct 240
tgactagata ggtaggaa ggagagagaa tcatgaagta gaggaggtgg ggttaagagat 300
gaaagaccac tgcatgagga taaggaatct aactgagtaa ggaaaataag cttaagctag 360
tttggctggg gaagtaaagc ctaagaaag 389

<210> 3666
<211> 434
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-003-Q1-E1-C4

<400> 3666

cgggtcgacc gacgcgtccg ggaaaggaga gaaagaggaa agggatgaaa tgcagagatc 60
tctagagaaa ggcaagaaag aaaagaaagg aagacacagt aaatgaggcg agaaagcata 120
ggaagtgaaa cggatttagga acccgtagtgc tctatgcagt aaaagaaaga atgagtaaga 180
aaaaagggag tcattccacc agggagtaa aggcgcaaga aagaaaccca aagcaattga 240
cggaatcg 434
aaaaaggggt ggatcacgta attaatccg atataaaccg agaaccc 300
ctctccaaga aggttgtcga cggctgtcga aagaacgtgc tgtaaagaat ggaacaagaa 360
cgaaaaanaa aaaaaaaaaa gaaaaaaaaaaa aaaaaaaaaa gacaacaaaa aaaaaaaaaa 420
acacacaagt gaac

<210> 3667
<211> 442
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-C9

<400> 3667
 cggccgaga ttacacgggtc gcaccacgcg tccggaaatg cttcatgtgg cgattgacgt 60
 tgctgttgcg ataacagagt gcaattgtta gacacatttt ccacaaaatc tacttcccaa 120
 agcaaggatt ctctaattcgc atcaactgatc atcggacttt gcaaccacaa tagcccactt 180
 taacggacac ttccgaagca accacagaat tctcggccac aatctttttt accgatcctt 240
 ccgtcgatca accgttggaa cttttgtgg atcaaaaat agctgaagat atcacattac 300
 cttacgaaat aagtaaagaa tgggggaaca aattgggtac cgtatgaaat aatttggggt 360
 attgttacc acaatgaaaa gatcgacgac aattgcgagt acaactcatt ctaaagctgc 420
 aatcaacaac acggatttg ct 442

<210> 3668
 <211> 410
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-D10

<400> 3668
 cgcgtccgcg gacgcgtcgg ccgacccggc agcttggcc cgaaaaaaag gtggtcacg 60
 gctgtcaaaa gaacgtgctg tgaagtgaga gaacgtacga gaaagccaag tgaggaaaaag 120
 aaggcaagta gagggcggcc cgagaaagga gagggcgtaa gacgtatac agagtaggaa 180
 gaaaagagaa gagagctaga aaggaggtaa aagaagagta aaaggactag aagaggtacg 240
 gaattcacga ggaacgagcg tgaaggaagg aggaatccca agtaatcgac gaagaaaaag 300
 ctccgtgaa agcgtgaacg gatTTTGTAC acactgcccc tcaagttctg gaagtgtgct 360
 aggaataagc aggagaagta caagagagta cgaaaagaag aaaggaagtg 410

<210> 3669
 <211> 279
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-D3

<400> 3669
 tttttcatg gtagcagttg tacattcaac atcatcaaat gccaaaggaa ggaaagaaag 60

attcttcaaa gaaagaagcc acaagtaaac ctgcagcagc agatgctaca aagacgacag 120
aaaagtctgg tccggaaagcc aagttgaagg gaactggtgc aaagaaaaca taaaaagttg 180
actatgcatg tgcatgtcctg ttatgtttt tgatgtctgt ttgatagttt ccagctattc 240
ttttggtagt gaataaaagag aaaattttt ataaaagaa 279

<210> 3670
<211> 277
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-003-Q1-E1-D8
<400> 3670

ccacgcaatc cgcacacgcg tccgataagg cgctggaata tctttgaaa caagcttcca 60
cgccaaaggt tgcttcttct tcataagaaa gttatatact tttctccatg tcttgatatg 120
agtcccgttc tcttctttt atctatatat aaataaatgt gtttccgaa tcaagttca 180
aggaaaaaaaaaaaaaaaaaaaaaaga agaaaagaga aaaaaaaaaaca aaaagaacaa 240
ggtaaaaaaag gggggcggtt ctagaggatc aaagctt 277

<210> 3671
<211> 427
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-003-Q1-E1-E12
<400> 3671

gggtcgagcc acgcgtcgcc caacacgtcg gcccacgcgt ccgggagttt ttaagaggca 60
tcgacaatcc tatcggtatc aagtgtggac catctttggc agtcgtatgt ttacttcgtt 120
tgttgatat tttagatcct gataatgagc ctggacgtat tacactgatt gttcgtgttg 180
gagcaggtcg agttgccaa catcttccaa ggttttaga agcagtgcgc aaggaaaata 240
gacaagtgggt gtggagttgt gatcccatgc atggcactat ggaaacatcc aatctgggtt 300
acaagaccag aagatttgag aatattctgt cagaggtcaa agaattttat gaaattcacc 360
gtcaactcca ttccttatccg ggtggaaattc atttggcaat gactggacag aatgtcactg 420
aatgtat 427

<210> 3672
<211> 391
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-E2

<400> 3672

attcacgggt cgaccgacgc gtccggcaaa gagagcgtta cctccgcga aagttagttt 60
tttgtcacct caatcggtga acaaagtcgg aagattgtgg agtttgagtt ctcgtgtatc 120
tagttttcc gacaagattg gttcacagtc tcatttctc catttcgtgg accgcagccc 180
agacgcgtct cgtcaccgag caagtcccag gggacgtgaa agggctgatg caggtccagt 240
gatgtcaaca gcgaaagttt atccggactt cacgttaaaa gaacctaggg aatatggac 300
taataaaaacc ttggaaattt gccgaattaa cggcaaaaat tccaaattgg taacaaaatt 360
gggaaaggc aatcacgtta aatttttaaa a 391

<210> 3673
<211> 368
<212> DNA
<213> Cyanidium caldarium

<223> . Clone ID: LIB190-003-Q1-E1-F1

<400> 3673

gagacaaaac gaataactaca tgatgacttc caaagggtgc aagatcccat gtctcaacag 60
gatttactag tggcaatccg acagactgta cagcagttgg aacaaatatt tacagataga 120
tatccgtcaa tgccatcggtt ttggAACGCG ttggatcgaa atgtgcaca aacgtttcgt 180
tccgcttga gttgacgcat agaagattca catgaaggag gatagtgaat gacaatgtga 240
gtgagctgca tggacgatag atcggtgggtt ctggaaagaa atttacttct agacgagaaa 300
gcagtgtgaa tttttactaa acagtttac taacaacgaa aatttcgcg cctggatagg 360
aattggcg 368

<210> 3674
<211> 444
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-F11
<400> 3674

ccggtccgag atttacgggt cgacgcacgc gtccgcccac gcatccgcgt atttcatttc 60
acattctcct tgttagaaaac tatgaagtct ttccgaattt ctattgtttt cctaagcttt 120
gttattgcattt cttatgcaggc agttgtatcc gaaatggcat ccaatgagtt tcaaagagga 180
ggatacgctc cttctcccttc caaggaatgc tgcatgacca cttgtcaata tgcaagaactt 240
tgcccaattt ctcaaccaac ttatagccaa gctccatctt acattccatc tcctacctat 300
ggccaagctc cttcctacaa tcaatattct tcttcgtacg gttcctctag ctatcgctc 360
ttaactgcag acgaaaacca acttgtgagc agaggaggtt atgcaccaac caaccaatgt 420
attctagttc ctatccaatg ctgc 444

<210> 3675
<211> 416
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-F12
<400> 3675

gggtcgacgc acgcgtccga actatatgcc gcagtctacg cagaggaaag tttctggcag 60
ttggattcca aagagtctgt tgtgaccata tatttggaca aagtgaacaa aatggagtgg 120
tggcctaagg tcgttaagtc tgagccagaa attgacactt caaagataga acctgaaaat 180
tccaggttga gtgaccttga cccagagaca agaagtatgg tcgaaaaaat gatgtttgat 240
cagaggcaaa aagctgctgg actcccaact agtgatgaac ttaaaaagaa agaactatta 300
gcaaagttt tggAACAGCA CCCAGAAATG GACTTTCAC AAGCCAAGTT TTCATAAAGA 360
aagacagacg aatggaaacc aaaacaatcc gaagaagcca gttttcgcbc ctggat 416

<210> 3676
<211> 490
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-F7
<400> 3676

<210> 3677
<211> 372
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-F9

<400> 3677

gggtcgacgc acgcgtccgc gacgggatgc acttgaaaag ggactcctcc ctccttgca 60
acttgggctg gtaaaaaaac taaactaacc aaataaaagta tgtaaaaaac attcttattc 120
cttgacaagt tttagatagg aaactacaaa atcattcaac aatcctataa agtatcacgc 180
ctaagagaat gcagcattga attaaaaaaaaaaaaaaaaaaaaaaaaaaaaataaaaaaaaaa 240
aaaaaaaaaa aaacaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa caaacaaaca ataaaaaaaaa 300
aaaaaaaaata aaaaaggaga aaacaaaacc aaaaaaatga aaaaaaaaaaaa aaaaagggggg 360
qcgcccccaa aa 372

<210> 3678
<211> 433
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-003-Q1-E1-G11

<400> 3678

gtccgagatt cacgggtcga cgcacgcgtc cggaaaaag agagaggcct cgttgtcctt 60

gtcttatgga agcgctcag cgatggactg gtcgatatat ccaaaagtgc cttctcaactt 120
atccatcaact tggacagttt agtagtaaat ggcgccactt ttccacagca ccttgggtac 180
aagataacttt ggaggaatat tttacgttcc ctagagagag tgaaagaat aactacgcag 240
tgaattggtc gttggcaaag ataggagtgc ctccaaaggg tgaagtttt tacaacgtgc 300
cttcgaggac gattgttgcc aactcgccctg gaaagcttag ccgtgagagg aggcacttgt 360
tggccccca tcaaaagacg ggcaacttcc aggaatttgt cctagaaaat aacttganac 420
cgagagaata tgc 433

<210> 3679

<211> 449

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-G2

<400> 3679

ggtcgaccga cgcgccggaa catgtcgct tcgcgtacgg ttgaagaaaat tcaacggttt 60
attgcttcag cttttgttagt tgtttctcc aagtcttggt gcccttttg tgatagagta 120
aaggagctgt ttagatcctt aggagtctct ttcaaagtaa ttgaatttggaa tcaggagaaa 180
aacggttcag ccattcaaag tgcattgtat gaattgacga aacagagaac cgttccaaac 240
gtttcataa acggacagca cggtgggtgt tgtgaccagg ttatgcaact ggaaagaaaa 300
ggtacattga aaaagttact tgagcctgtt ttgacggcct aaaatgcgtt atctactgct 360
cagccatatac gttgccgctc cagtcttcta tttagaacag aaactcaagt catgaaattt 420
ggaaaataaa cagccgacat tgtctttac 449

<210> 3680

<211> 472

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-003-Q1-E1-G5

<400> 3680

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tcagcttgtg gaccgaacaa tgtcgaatac gattccacat ttactgcac caattccatt 120
gcttatcatg actgtttggg acagtctatt gtacaatatt gtcgtgtcat tcccgatggc 180
attatttgtt tctttccctc ttatcggtta tttagaaaatg tggttcgacg ttggcgtcaa 240
tgcgatattt ggaaagaatt ggaaaagtgc aaacaagtat ttatcgaacc gagccatcat 300
gaccgaggc atttcgatac cattttactc tcttattatc atgccattca caagaaagaa 360
ggtgccttat ttttagcagt ttgttagagga aaagtaagtg aaggaattga tttcaaggat 420
gagttgcac gangagtgtat aattgttggt ttacctttc ctaatttgag ag 472

<210> 3681

<211> 435

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-G9

<400> 3681

gtccggaaat accgggtcgc agcacgcgtc cgatatcgta tggtgttggt ctgggtgctc 60
aaggtgtgaa atggcagtag ttgaagataa cagagtcttt gttggggc ttccttggtc 120
agtttagtgaa gaagaccttc gtgaaacttt ttccaaatat ggagaagttg ttgatgcaag 180
ggtgaatatac cgtgttcctt ttgtttggg ttaaacttg ctcccttgac tacctgcacc 240
tattctcggg ttccctttta tttgccccat agtttagtgtc actatctagt cgcatgttac 300
tttgagaggg tagagagctt ttcttagttac ttataactg ttcacacttg ggaaccctcg 360
aaaatagtgt gaaggatatg cagttgggtt gactagtgtac caccaaagtt gttgttacta 420
tatagtgcac acaat 435

<210> 3682

<211> 322

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-H11

<400> 3682

ggtcgacgca cgcgtccgccc cacgcgtccg cccacgcgtc cgcccacgcg tccgcccacg 60
cgtccgcccc cgcgtccgaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa ggaggatgat ataaaaggt aaaaaattaa 180
ggtaggcctt cataaaagtt caaatcttt ttatgggtga atgtaattta aaatcttgg 240
aagtggttt ataaatttaa tttctggag ggtctttta aaagctagtt tttggaaat 300
ccttgagatt tccctttta aa 322

<210> 3683
<211> 296
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-H4

<400> 3683

tttttcggat ttctttctt tcatgcttta acgctctcca ctcaaggtaa gcgttccttg 60
tcgcaaactc aaagttgttt tggttaggagt ggtgaaggca gcggaggtga cggtggtcga 120
aagagtagtg aaggtagcga aggccagggt ggatagtcga gagggaaaaaa gcccagaagc 180
caagataagg tatcaaagta aagaaagaag gaaaaggaga agaagagagg gttaggcttag 240
aagcagcaaa ccagagagga aagcgtaaa gcatgaaaga aaagaaatcc gaaaaa 296

<210> 3684
<211> 322
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-A1

<400> 3684

ctgcccgtac ggtccgagat tcacgggtcc acccacgcgt ccgtacaagc ttccaaattg 60
tttgaagtg tgctgtcatg actaagccat tttgcattgc aatcgcgact acatttatgt 120
ttacaaacat gccttaccga atgtcatcta ccgacctagg tgaacccatg cacagtacga 180
ctgcattgtc caacattacc caagcggtct tcttcacaga tatcgacttc acatggtcta 240
tagaacgtgt cacagttaca agcgctccca acgcaaactc aatgtcagtc acatttgacg 300
gacagttgat taagtcagca tc 322

<210> 3685
<211> 454
<212> DNA

<213> Cyanidium caldarium
<223> Clone ID: LIB190-004-Q1-E1-A5
<400> 3685

attcgccgggt cgacccacgc gaccgcaa at tccacgactc cgatgtttag agcttccgaa 60
aaggcgcgta aaccacgcgt tcataatcttt gatggtcctt ccagtgaaga tatgcccttt 120
tttatggagg aaataaaagaa aataaaagtt gcagaacttg ctatgttga aggagaagaa 180
gaaggaggag aaaccggcca cgcagaagcc ctgcgggg aagcttctga accttggcat 240
aacaactggg atgttgctca cttggaacaa gaggaaaagg aaatacaaga cttgaaagaa 300
gaaatagaga gacttcaagt cactaagaag gaattgttc agcaactaaa ggaagtcttg 360
atgaaagaaa ggcggataa gagagagacg acactcccct agttgttgc ttacaagtct 420
attttacaag ctctctttat gaacctttcc aact 454

<210> 3686
<211> 476
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-004-Q1-E1-A7
<400> 3686

ttcnccgggtc cacccacgcg tccgcacacg cgtccgtgaa ttcagaagcg acctcagggtt 60
agtgtactgc gatcatttta gaacccaaa tgccctgagt cttgctagtt ttctttata 120
gagaagaaaa tatttgataa gaaggcagga agaaatgcac gggactaat atgtgtgaa 180
atattttga aatactagat tgtgctctat ttgatgacga cagaaggctt cttgttctga 240
aatggccctg tcctgaaaag tcgatatacg taaggataa ctctaagagg tgttaatgc 300
cttgtgtttt ccaccatag acacgacact tggaaaag aatcagctgc caaattgtgt 360
tttggattcg ttgtgttaaa gttgttcagt gttgatgaa caaagaggtt ccaaagcctg 420
caatagaagg agaaaattta ctctcactga gaactttcga ctgatcagag caagat 476

<210> 3687
<211> 316
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-A8

<400> 3687

ggggccaccc acgcgtccgt agggaaatttggttgaa ccggcaggat ttagagaagt 60
atataatcggttccctggaa attgctggca gtggagtgag cgctggagaa cgtgcagtag 120
aagccctgtt aaacgaaacc ctatatgtta atgttagatct cagggacttt ccccgtttg 180
atggggaata tttataacct acgctttaa agaagattag caaagaagct cttccacgc 240
taccaaataa gccagaatttgc tcgccaaag tttaaagaa taagaaagac ccaaaaaaagt 300
gggtaaagccc cttaat 316

<210> 3688

<211> 398

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-B1

<400> 3688

cggccgaaa ttcacgggtc gacgcacgcg tccgggttac caaaggagt aacgggaaca 60
gcttaacct ggcccttatt gatcatggtt ttatcttacc agacaaattt caaagctatc 120
cttggctgt ttggatggac tggcctcagg taaaggagcc gtttgcgaa gatgtaaaga 180
gatatgcaga aacgctagac ggtgaaatgg acgctcgatc gatcttggac gaaacagatg 240
gcagactgtc aaagaatagc ttaagaattt tgccataat gactgcgctt cttcagagag 300
ccatggagaa gaaccttact ctgtatgaag tcggttccct tgtatatgtc cgcgatcccc 360
acacagagggaa aagcgagttt tcttcattat tgccagaa 398

<210> 3689

<211> 393

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-B4

<400> 3689

ttcccggggc cacccacgcg tccgcagacg cgtcggggaa cacatggggg aagatataat 60
tcaagatgca gtacattgtc ttagacccatc tgatcgccaa aattgtcctc aacagcgtgc 120

ataagtgcc a cacaagg tta caccacgtt a tgcacgaat tttgcacata taccaggaga 180
taatccaagg atgactctaa agatgacgca a aacttgaag catcacactg agcagcatct 240
ccatcggtt cacactgcgg tatcgat gggattcaggc attgaagcac agttcaagta 300
acagatcggtt tagcacattt ttttgcacat gagttacaat gagatgtata tagcatggag 360
tgtaacaggg aatgttagatt attagcgaaa aca 393

<210> 3690

<211> 478

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-B6

<400> 3690

taccggtccg tacattcacg ggtcgcagca cgccgtccgg a agagattaga tagagcacct 60
gtcattgcta ttaaacgcac tcataatggac gagaaactag caaaagctgc ggaatacgcc 120
ggagctcacc ttgttgaaga acgttctgtt gaaaatgcag ttttgcacaa tgtcaaaaaaa 180
gtatggaggg tgaatacagt aaaggaagat ggatcgaaag aggagggaaac atatacagga 240
agaattgtt tttgtgcgg a tggtgctcct agtcgactt c gatgaagtt agggttggta 300
tcctcacctc cacagggtac ctgttccaga acctttgtgg aaaggaaaaa tcaaaaatttt 360
tggacagacg ggcctgtat ttatccaaga gatttattgc ctggccattt cgcagttttt 420
cgtcaaccaa atgatgaact gaacctttgt ccctaaaata atcctggaaa tccaaaag 478

<210> 3691

<211> 455

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-B7

<400> 3691

ttccgggtcc acccacgcgt ccgcaatggt gcaaaaatata tcgaccacta tttgccgcac 60
caactaacgac aagccacatg ttgtatgcta caaagaatag ctggctgacc attccatctg 120
gctgcacgct tctatgtcgt agtgcgtt cccacgggtt catagcagca gcttcggaaa 180
gcgatccttc taccgctcca atgtcgaaaa ataaaaaggc aacgaatatg gaaacgcagt 240

cttttgtggt gagcgtgacg ggttcagacc gagtaggcattgtacacgat tttagttggg 300
caactgaaaaa tatttctgcc aatgtgaaat cgagtcgaat ggcttgcgtc ggtggcgact 360
ttgcaatgtatgttggtc agtttgaata agaaggatgg aagggtgata cagtcgacgt 420
tagagtcagc cttaccaggg tttcaaattt gtact 455

<210> 3692
<211> 356
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-C1

<400> 3692

ggtccgagat tccccgggtcc acgcacgcgt ccgaatttac aagaagaaga agaagaaaca 60
acaacgacag cacctaaacg agcagatgtc ctgaactgga tacaagagtt tgtaacaag 120
atggatttat ttgaaaatta attggaaact tttcagaat acacaaattt caaataaaac 180
agatattatg taaattgttt cagaaaggaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
aaaaaaaaaaa gaaaaaaaaa caaaaagaaaa aaaaaaaaaag gggggcctcc ctaaaagatc 300
aaaactttgg tacacgggca cccaaattca aatcaactgcc acgggggtca ccaaaa 356

<210> 3693
<211> 351
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-C10

<400> 3693

gaagtcagca gtggggaaaa ttgggcaatg tacagggaaatgatgacccag taatgaggag 60
tggagtaaac agaaaaggaa gtaaaaggag ggaatgaagg gaagttatgg caaaaacacg 120
tgccagcagc agcggtaaaa cgtgtgtac aagcgttagag cagaagaact ggggttaaag 180
gtcgagtagt agagtaagtgtaaaaggaa agggaaaggag agaaagagga aaggatgaa 240
atgcagagat ctctagagaa aggcaagaaa gaaaagaaa gaagacacag taaatgaggc 300
gagaaagcat aggaagtgaa acggattagg aaccctgtta gtctatgcag t 351

<210> 3694
<211> 355
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-C2

<400> 3694

tccgggtcca cccacgcgtc cgaaaaagtta cagtggtttg gtaaaaactgc ttttcgttag 60
tttttacgtg aaaaaaaaaaccct ctcttttttgg agtgaataaa ggctttacgt catctgtgg 120
cgtacaccttag gcatattgtg acataacttgt ccagatctag tgaataaact acatTTTAA 180
acaAAAAAAat aaaaaaaaaaaa aaaaaaaaaaa aaaaaaagga atacaaaaac aagaaaaaaa 240
ggtcagcccc ccgataggga acgacataga gtaagagtaa agtcaacttg aaacacctga 300
tatgtcctcg actcagagcg gctcacagga cgacgatata tagtgacttt tcagg 355

<210> 3695
<211> 462
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-C3

<400> 3695

ccggccggtc cgtaaatacc gggtccacgc acgcgtccgc ccacgcgtcc gcccacgcgt 60
ccgccccacgc gtccgccccac gcgtccgccc acgcgtccgc ccacgcgtcc gggaaaccag 120
gttatgagaa ctgtgtttct cttgccgtca ttgcgaagac caacaccaac ttccgaactg 180
caggagtttgc tagagtgcct ttgaaagata gacacggaca aataacccca aatgttctca 240
caggatgtat ttcttgtgct tcgggtgacg gtgggtcccat ctgggtggac gatcctattc 300
cagataatct gttgcaaaaaa ctgaaagagt tgggtcagct gcctccagag gaagaagaaa 360
agccgagcga cgacaaggag gacgaaaaga aggagcaaga agagacgcaa ccaaaggagg 420
aagaagagaa ggaagaaact gttgcaagtg acgagagacc ag 462

<210> 3696
<211> 456
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-C5

<400> 3696

gggtccaccc acgcgtccga agagtaaaag gactagaaga ggaaaggttt acgagagaag 60
gaagtagaaa gaagagagtg taaggccgcg tcataataga aatccgaaag gactagaaga 120
aaagagagag aagaaagaaa agaagagaaa aagcccagaa gccaaagataa ggtatcaaag 180
taaagaaaaga aggaaaagga gaagaagaga gggtaggctt agaagcagca aaccagagag 240
gaaagcgtta aagcatgaaa gaaaagaaat ccgaaaaaaga agagaaaaag gtaagaaaaga 300
ggaccgaatc agggtaagag gtagaggagc aagaagagaa gagagaatgc tgggtggagt 360
agcgaaacaa gagaagggaa gtaaaaggtt agaaagagga aaggttacg agagaaggaa 420
gtagaaagaa gagagtgtaa ggccgcgtca taatag 456

<210> 3697

<211> 232

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-D1

<400> 3697

tgacggtccg agattcacgg gtccacgcac gcgtccgcaa taaaactatc cagcttggat 60
tttagttctt gtcgtgaact actaaataaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
aaaaaaaaaa aaaaaaaaaa aaaaaaaggg cgaaagccca aaaggatcaa accattactt 180
acgcgtgcat gcaacgtaca tatctttca atagtgtcac ctaacttcaa tt 232

<210> 3698

<211> 356

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-E1

<400> 3698

ggtccgaaat taccgggtcg acgcacgcgt ccgcggacgc gtggcgtgg ttgggtgggg 60
tgagcatgcc gccgcaagta gaaacaagta cacttctgg tattgcagta gcctgaata 120
aaggacacgc cgttacgaaa agggaaatttt caaccaaagg actgaaaagg gagaaaaaaa 180
cacgccaagt ttgtacgaga aatcatccgt gaagttgtg gtttgctcc ctatgagaag 240

cgaatcatag agttgttag agttggaaa gataaacgtg cgctcaaata tgcaagaaa 300
gaggcaaata cggaaagca gtaaaagaag aaagagaaag aaaaaaactg agtac 356

<210> 3699

<211> 373

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-E4

<400> 3699

tggtagctt gcccgtaccg gtccgaaatc acgggtccac ccacgcgtcc gtatccgagt 60
tgtgtcggt cctcatggga cgtattacgg agtggaaacg acccgttcct cgttaaccag 120
ttatcgaccc aaaacctaaa acgggtaaag taaggagcaa tttggatcca accgaatacg 180
gtagaaatgt ttgcctact tccaatgggt gcaataatgg tttgacttca gctacaagaa 240
caacaagaac aagtagtgta ttcatggag ggcttccgg ttttggggc tctaaaacgt 300
gggcttatat gtccactata aacaaactca cagggatgaa agataacggg ctcggcgta 360
taccgatcga aat 373

<210> 3700

<211> 449

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-E5

<400> 3700

taccggatcg aaattcgccg gtccacccac gcgtccgcac acgcgtccga gaaagaggca 60
aatacggaa agcagtaaaa gaagaaagag aaaggaaaaa actgagtatc aggaagaaaa 120
gagggagtag atgaggaaag aaagatcaag gaagtaagag taagagaagg agtaatgtga 180
atgaaagcag gaaagtattt gaagaaagag gcaaatacgg gaaaggcagta aaagaagaaa 240
gagaaaggaa aaaactgagt atcaggaaga aaagagggag tagatgagga aagaaagatc 300
aaggaagtaa agcctaagaa agatcaaatt aggcaagcaa aggcatgaga gaagtataat 360
agcagaagca tgcttgaaga aaaagaaaga gatttcagaa aggaaagaaa agtcagctat 420
agagaacagg tgaaggagaa ctcaaaaag 449

<210> 3701
 <211> 472
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-004-Q1-E1-E6

 <400> 3701

gggtccaccc acgcgtccgg aaacgtttag agttggagca taggtgtaga cggttattga 60
 ctcgttggaa agaaatagga gatgaaataa acaagacagg tactggtaga aagagcagat 120
 tggagctttg tagacaagag caagaacaa ttatggaagc tgtaaaggca gaacggaaag 180
 ctcttcgaga atggaaagag aagagacgaa attggattca acgaaaattt cttcagcaca 240
 ccaaaaacaac cgacgcgacc aaatagacat gaggggacat ttggaaattt gtttgcgcg 300
 tcggtaagc gcacggaaat atttctagt catgcaaata tttgtaaaaa cggtgacagg 360
 aaagaccata acgttagagg tcgaaccttc ggatactata gaaaatgtga aatcaaagat 420
 tcaagataaa gaaaggtata cccctgatta acaaaaaaaca acacaaggca cc 472

<210> 3702
 <211> 292
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-004-Q1-E1-E7

 <400> 3702

attcgcgggt ccacccacgc gtccggatct atgggagaaa cttattatcc tgagcgaaag 60
 agtcaagaaa cattagacgc tgaagaactt caacaaagga agagcatgaa taagtcgagt 120
 tcggaacgac caaaagaaaaa tggtgcagct gcatcatagt tgagttgtt tctatcataa 180
 acttattattt caacgtggcg tacttgttta cgttgttcca ctttgttgg tttttcttt 240
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa acctaaaaca aa 292

<210> 3703
 <211> 368
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-004-Q1-E1-E8

<400> 3703
ggccctgccc gtacgagtcc gaaattcgcg ggtccaccca cgcgtccgca gacgcgtggg 60
tagccttgg aacaatgaag aaaggagaaa aggcgattgt gactattca cctaattatg 120
cctatcaggg agttggaata gaggctccac caggtgttc aagagatgct acagttcaag 180
tagaatttgg aactggttca tttgaaagag cgaaagagtc ttgaaacttg tccaaggaag 240
agaagattga aaactcgatg cgcattaaag aaaaggcaa tgagttgttc aagtctggta 300
gatataaact tgcgaagaag aagtatgaaa aagtgataag cgatttggag tttgatgtgc 360
gtaacaag 368

<210> 3704
<211> 430
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-F12

<400> 3704
taccggaccg agattcgccg gtccacccac gcgtccgcat tacctctcca agaagggttt 60
gcacggctgt cgaaagaacg tgctgtgaag tgagagaacg tacgagaaag ccaagtgagg 120
aaaagaaggc aagtagaggg cggcccgaga aaggagaggg cgtaagacgt gatacagagt 180
aggaagaaaa gagaagagag ctagaaagga ggtaaaagaa gagtaaaagg actagaagag 240
gtacggaatt cacgaggaag gagcgtgaag gaaggaggaa tcccaagtaa tcgaggaaga 300
aaaagcttcg gtgaaagcgt gaacggattt tgtacacact gcccgtcaag ttctggaagt 360
gtgcttagaa taagcaggag aagtagaaga gagtaggaaa agaagaaagg aagtgaagac 420
gtaagacgtg 430

<210> 3705
<211> 354
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-F3

<400> 3705
ggtcgagtca cacgacgggt caggcatcag cgactgtttt gaaaaaacac agcactctgc 60

agaaaagaga aaatgtaaag tatagagtgt gcggcctgcc aaatagtaga gaagaaatcg 120
atgaaaagtga aagcgagtaa aagatgaggt atagagaatg gcggtcctaa cggttaaggat 180
ccaaaggtag cgaagtaaat agacgttga aaggcgtcca gtatgaaagg agaaacgagt 240
gtagcactgt ctagtcgtcc aactcagcga aacagcaata actgtaaaaa tgcaagtaaaac 300
tagcagtagg acgaaaagac cccataattc ttgactagag aggttttaggg gaga 354

<210> 3706
<211> 429
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-F9

<400> 3706

cgcctgccgg taccggtccg agattcccggttcac gcgtccgaaa aagcgatcg 60
aagacacagt ggatgacgca ataaatcatg cgaagtgaca cgggttatga acccgtgttag 120
gcaacgctgt aatcgaagca atgagtaaga gaatggggag tcattccagc agtggattca 180
ccagggaaagt aagagccccca gagcaattga cgggactcgt gacaggggggt ggatcacggg 240
gttgattccg ttaaaccgac aaccttacct ctccactaac gtctcgcaca gcggtctaca 300
gagctttctg tgaaatgtga tatcgtatga gaaaggctac tgaagaacccg aatgcaggtaa 360
aaagggcgcc tgaaaaacga cacggcgtaa gacatgacat agaatatgaa gcagagttag 420
gagagqctag 429

<210> 3707
<211> 378
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-004-Q1-E1-G10

<400> 3707

cacacgcgtc cgaaaagaca cagtaaatga ggcgagaaag cataggaagt gaaacggatt 60
aggaaccgt gtatctatg cagtaaaaga aagaatgagt aaaaaaaag ggagtcattc 120
caccagggaa gtaaaggcgc aagaaagaaa cccaaagcaa ttgacggaa tcggaaaaag 180

gggtggatca cgtaaattaa tccgatataa accgagaacc ttacctctcc aagaagggtgt 240
tgcacggctg tcgaaagaac gtgctgtcaa gtgagagaac gtacgagaaa gccaaagttag 300
gaaaagaagg caagtagagg gcggcccgag aaaggagagg gcgtaagacg tgatacagag 360
tagaaaaaag aangaaaa 378

<210> 3708
<211> 266
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-G4

<400> 3708

ggtcgacgca cgcgaccgta tgggtggtag caaattggaa atatcaagag agttgtttc 60
attcacacag agttagctc taatatggac ttgaacccag agatgagttt tcgttttcc 120
gcctggttct cgactcctgt tggtacgaca acttgagtag ctttctctcc ttttgtcaaa 180
gcagtcttct ttttcttctt gctcaagtc ttttggcgc gattagcctg ctgttttgt 240
tttttaaaaaa gctacaaaact ggggta 266

<210> 3709
<211> 369
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-G6

<400> 3709

gggtcgaccc acgcgaccgc ccacgcgtcc gcttgcaagg ttggcgatca tacttgtgt 60
ggaggtccac aaatgttaca actttctctg gatggaacga gactgtatgt aaccaattcc 120
ttgttcagtt cttggataaa ccagtttat cctgaaatat cggatagagg ctcctatttgc 180
gtaaagggtta attgtaaacac ggaacaacgt ggaatgaaac tcgaccattc cttctttgtt 240
gacttttggaa aggaacctgg tggccctgt agagcacacg aagttcggtta ccctgggtgg 300
gattgtactt cggatatttgc gatatgaccc agttgtttaa tgctatagtg aaggtatgtt 360
tttgcttcc 369

<210> 3710

<211> 345
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-G7

<400> 3710

ggtccacgca cgcgccgca cttgcagta cttccacca aaagtattcc ttctctatcc 60
acttcaaata cttgccacca ttgcactgtt cttcaggca aaggtattcc acagtcttt 120
gcagccaact aaatacaacc acaagctata cattcaggtg ctactcgaca acacaagtca 180
gtacgcaaca tatcgttgc atagttcaa gcacgttgca aaaaggactt ccaatggcg 240
tctccagcgt ccactccgga gtgactcctc aaagtgttga tatataccaa aataaacttg 300
tgccgatgtt ctactcctgt atgaaaaaaaaa attttcaaa ggaaa 345

<210> 3711
<211> 400
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-G9

<400> 3711

ggagacccaa attaaggtga gagaatggac gataaggaac taggcaaaag gatatggat 60
ctgcggtaga acatatgaaa gaagcagcac cgactgtta gaaaaaacac agcactctgc 120
agaaaaagaga aaatgtaaag tatagagtgt gcggcctgccc aaatagtaga gaagaaaatcg 180
atgaaaagtga aagcgagtaa aagatgaggt atagagaatg gcggtcctaa cagtaaggat 240
ccaaaggtag cgaagtaaat agacgttga aaggcgtcca gtatgaaagg agaaacgagt 300
gtagcactgt cttagtcgtcc aactcagcga aacagcaata actgtaaaaa tgcagtaaac 360
tagcagtagg acggaaagac cccataattc ctgactagat 400

<210> 3712
<211> 270
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-H1

<400> 3712

ggagaagttt taacgtttga tcagttggca cttcgccc ccaagggtcc caattgcatg 60
cttttgagag gtccgaaaca cgctcgcgaa gtttataaac actttgctgg tggctgtg 120
gaaggtcacg tgaagccta tggtaaac aaggaaagga agctggaaag agctcgtgga 180
cgacgtccaa gccgtggttt caagaggaag ccaaagaagg tggtagttt ctataacttc 240
tataaataca caagtttcc tagtcaaaaa 270

<210> 3713
<211> 429
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-H10

<400> 3713

ttccgggtcc acccacgcgt ccggAACATG tggagaggct ttccacctga tcattccgag 60
gttggtcacg gtggattgtat tggattgcgc cgtgtcaat gttctatgc aggattggag 120
tatTTAGGAT ttattcttgc tgTTTGTttt gttcctgaat attccaatgt tggacttcgt 180
ggggaggaca agcgttattt ggagttgaga actcgTTATG ctgctcgtct agccaagaaa 240
tatggagtgg aacctgccc tccggatgac caagaagcaa ctcgactagg tcgttctct 300
gtatggaacc tcatttcacg caagttgacg ggtactccgg aaagtttga agaagccaag 360
aaagaatata ttcgtatgtt gttgtctcgt tggatgttgg aaaccaatga acaagtggaa 420
tattatgca 429

<210> 3714
<211> 267
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-H3

<400> 3714

tcccccgggtc cacccacgcg tccgcagacg cgtccgtat tggataccca ttaagagctc 60
gatgatagat tgTTTgaccg aacgtactgc gcacctaact ggggtttcct gtgactaaat 120
gaatccccca catacgTTTg ctctcgaat tgTTTatgtt aacagtgtaa tttcaacgtc 180
cgagttggaa catcatgtcg gtaattaagg atctaaactg gactcctcga caaattcgag 240

tactccacca actattccta atatatac

267

<210> 3715
<211> 339
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-H6

<400> 3715

taatattctt tggcttgga caatgggtgc aaagactgct ctgagttgcc tctttctctc 60
tttccttatac gctgccgcag ttgcagccga cgttagttca gaggagagat ggggatatgc 120
tcagcaaacc caacaacagc aacagtgc acaagtatgt aaacagtatg catactatca 180
gagtccagtc tgcaacttccg taaccacaca gagcccatac tggaccata gctcgaagac 240
tgtgcaaacc tttgtcccaa gccagtgcaa gtacttatac ccaatctcct acatggacct 300
attgcagcac ctacaccaac actagcgtac caccta 339

<210> 3716
<211> 217
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-A12

<400> 3716

cccacgcgtc cgggtggaaaga acatgaaaagc acagaagagt aaaaggacta gaagaggtac 60
ggaattcacg aggaaggaggc gtgaaggaag gaggaatccc aagtaatcga ggaagaaaaaa 120
gcttcggta aagcgtgaac ggattttgtta cacactgccc gtcaagttct ggaagtgtgc 180
taggaataag caggagaagt agaagagagt aggaaaa 217

<210> 3717
<211> 416
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-A3

<400> 3717

gtccacccac gcgtccgcaa acgcgtccgc ccacgcgtcc gaaccagaca aacagagctc 60

agttcttcct tttatgatat ggattctctc aaggtttctt ccgagtcaaa tctaaagagt 120
gttgcgatc aaaagagtgt gcaaggatct gccaggagg taatttagtaa tggcagtgg 180
atttcacgga aaactgttcc aaaagataat atgcagaatg attattctgc ttggcaaact 240
ccttcgacag gaaaagatac aattgtaaac tcgacatcga aagggtttc atggaagatg 300
aatccgcaag gaatggaata tacttcggca gaaacgactg gagttgtcta tagtgacgt 360
caacctaaac ctgctgtgga taacaactca caagactatt cgagaatgga cactt 416

<210> 3718

<211> 272

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-A6

<400> 3718

gggtcgaccc acgcatccgg aagaaaagag aagagagcta gaaaggaggt aaaagaagag 60
taaaaggact agaagaggtt cggattcac gaggaaggag cgtgaaggaa ggaggaatcc 120
caagtaatcg aggaagaaaa agcttcggtg aaagcgtgaa cggattttgt acacactgcc 180
cgtcaagttc tggaaagtgtg ctaggaataa gcaggagaag tagaagagag tagaaaaaga 240
agaaaggaag tgaagacgta agacgtgaaa aa 272

<210> 3719

<211> 375

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-005-Q1-E1-A9

<400> 3719

cacacgcgtc cgccccacgcg tccggaaaga agcagcaccc actgttttagc aaaaacacag 60
cactctgcag aaaagagaaaa atgtaaagta tagagtgtgc ggcctgccaa atagtagaga 120
agaaatcgat gaaaatcgat gcgagtaaaa gatgaggtat agagaatggc ggtcctaact 180
gtaaggatcc aaaggttagcg aagtaaatag acgtttgaaa ggcgtccagt atgaaaggag 240
aaacgagtgt agcactgtct agtcgtccaa ctcagcgaaa cagcaataac tgtgaaaatg 300
cagtaaacta gcagtaggac ggaaagaccc cataattctt gactagatag gtttaaggan 360

gagagagaat catga

375

<210> 3720
<211> 266
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-B1

<400> 3720

catggagaag ttgcacaaag agtatgtga agacatgtaa catcaggtaa gtatatacag 60
gtaagtatacg ttttggatt tggaagaaac aaggtacttc aagtagtctt ctttgttg 120
tataggatag agcataactt ctaaacttat ttatggact tcaattgaat tataataaaa 180
catttttga ctaaaaaaaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa aaaaaacccaaa 240
agaacaaaaa aaaaacaaaa aacaaaa 266

<210> 3721
<211> 308
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-B10

<400> 3721

cggggccacc cacgcgtccg cacacgcgtc cgccggacgcg tggggccgacg cgtgggggtga 60
tccaactcga gcgtatcgaa aagaagcaac gagacattgg atggatattc aacaacacgc 120
cgaaagagac agagcttgat gaaggcactt acgttggat caacggattt ggcataaaaga 180
gtttcatgga ataataataa taataataat aggagactcc tttgactcaa taaaatgcga 240
gacaaaaatta cacaaggga taaccttcgc ctagcttattt ttacgctcct tcataaacat 300
accaatgt 308

<210> 3722
<211> 210
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-B11

<400> 3722

cccacgcgac cggtagcaga taatggaa aagagaaaagg aaaaaactga gtatcaggaa 60
gaaaagaggg agtagatgag gaaagaaa tcaaggaagt aagagtaaga gaaggagtaa 120
tgtgaatgaa agcaggaaag tatttgaaga agagagtgt aagcgctac ctttgata 180
atgtcccagc gagtgaaaga ggaagcaaaa 210

<210> 3723

<211> 351

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-B4

<400> 3723

gtcgaccgac ccgtccggta tcttgagt gагtcctag aagaatactt gttggttct 60
ttgcagactt gagagtggag gacaatgaag ctgtatcaa agctgcacag aatggtgctg 120
ttccccgggg tctagtatta cctctagtgg cgctgcataa agaaattcca aggagtgcta 180
tcgtttagtt gaagacagaa ctgcaaagac gccgctctga cctgtgcgtc ttgcccaagt 240
ttttagtacgga ctccatcctt gagatatgcc ataaatacgg aatagaagct atctactaca 300
actatgccga gctcccagac caaatgcagc ttcaaatga tatgattact g 351

<210> 3724

<211> 371

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-B5

<400> 3724

gggtcgaccc acgcattcga tacgacgaaa atgccaagga aaaaaagtgc aaaaaaaaaa 60
aacgttgat attgcaaaag tttctttcg gatattacag tctctacatt ttactcagcg 120
agactctaca aggttgcacct aaaaaatata tattttctag tttcccaagc ataggtatac 180
tactcgtcaa tgactacgta ttcaaatgct tttccaaat ttctgtaaat aactagcaag 240
cgtttgctgc aaacgatcgg acaagttact ttgaataacg ttttcaacg ttggattatt 300
tgccacaact tcggtaacgt tattgtgag cacctgata gaaagatgag ataatacaaa 360
gcgcttttc a 371

<210> 3725
<211> 472
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-C10

<400> 3725

tccgaaattc acgggtccac ccacgcgtcc gcagacgcgt gggcggacgc gtggggatag 60
actcatttcc aaagcaaggt caaaaatggg tggtgcttat atgattttgg aatttgcagc 120
ctttatatac tggcgccctt ggatttactg tattccgtta tcgactgcgc agcatcaaaa 180
gagaagattg ttgccacggt ggaattaaaa aatagaaaaa tgcgactcta gaaatttggc 240
gcctctaattt aatcctaaat aaatgggatt gttagcttt ggagaaaaagc tgaaaaatcg 300
tttttgtgc acgaagagag atgagtcgct ctatggagat atcaatcaaa gcatcgagg 360
cgagagcac attacaaagt acacgaaatg aagaattcaa ccatggcaac aatttttacg 420
aagaaattga aaaactaact tctctgggt acaacgcac agatatacaa aa 472

<210> 3726
<211> 474
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-C11

<400> 3726

gtagccgtcc gaaattccaa ggtccaccca cgcgtccgaa caacagtgcc aacaagtatg 60
taaacagtat gcatactatc agagtccagt ctgcacttcc gtaaccacac agagcccata 120
ctggacccaa tgctcgaaga ctgtgcaaac ctttgccttcc agccagtgcgt gtacttatac 180
ccaatctcct acatggacct attgcagcac ctacaccacc actagcgtac catctcaatg 240
cagcaaggcc gtgactaccc atactcaaacc ctgctgtgct tatgccaac aaacttccta 300
tgcagtcaatg accgagcaat atgttcagga aactgtatct gctcaatata cttcttacta 360
cggcgaatca tcctccagct attattaccg agcagctgct cctcagagat ggtatgagga 420
acaatgcacc tcatactgct gggttccagt acaggactat gaaacttaac aatg 474

<210> 3727
<211> 395
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-C12

<400> 3727

ggtccaccca cgcgccgaa agatatttt tgggtgaat tggtggaa gggatggaa 60
tgacgagaga tgaaacaatg attaggcgcc aatcctcttc atgtctgcat gcttgtgtt 120
ttcacacttg ttggctatca aagccgcgaa tagatagttt caaatacaaa acatcgcca 180
agtgtttcc ttcttcctcc gagcgctgctg cttgcaccg tttcaagact cgggtcagta 240
gaaggaatgc gcaggtcgtg cggttatgt ttactaccga ccataactcag ccactgtact 300
tggcacaatc cttgtggct tttacgcctt ctgcattcctt aatacagttt actagtggtc 360
tgggtggttt ggcaactt gccttggta tcata 395

<210> 3728
<211> 279
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-005-Q1-E1-C4

<400> 3728

cgcctgcgtt ancggccgaa cattcacggg gccacccacg cgtccgcaga cgcgtgggtt 60
tttgctaaca cggtgggttga gttgtagaaa gcatttgata aatttcccgc gaggaatcct 120
acttgggacg tgcctccaa tgctgcagag agctattcgg tatgtctgtt tattgcttgt 180
tttcataaga gagagagagt tggacatcga ataaagaaaa aaccacacaa agtggaacaa 240
cgtaaaaaaaa aaacaaccag aaaaaacaga aaccacacaa 279

<210> 3729
<211> 308
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-D11

<400> 3729

tccgaaattc aagggtccac ccacgcgtcc gcaaacgcgt cgcgcacgc gtccgctgag 60
ataacaaagt ggcaggatcg actggcttgt gcgttctcc atccacaag catagttgc 120
cagttgtatt gtttgatgg tttctgttga ttattccctt tttttcaca aactttgtcc 180
agtacttgtc caatagtcat atattggta taatacaacg ataaaggttg ttgttagtcat 240
ctcgttagtgg ctaagttgc agcaacatgg tcatactatgg tgacatacaa ataaactcta 300
tcttgcat 308

<210> 3730
<211> 350
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-D2

<400> 3730

ttcacgggtc cacccacgcg tccgcaatct ttgcagatt ggagtccgc agagtcactc 60
gatactgtta ctccctgtgt atctagaccg attgctgttc atggaccaaa atattcacct 120
caaacgacga caagagaagc tgggtcggat atccgagcgg aaggtgaact ttggcaacgg 180
aaaggacatt tggtaagtt ttggcgacga cgatttgctg ctatactacc acattctgtt 240
tttggaaatg tattgtgtat ttgcagatg gaaaagaacc agactttgca gcctaccaag 300
tcaaaaatgc ttgcttgaa aaatactcaa gtgaagagcg aaccgaatac 350

<210> 3731
<211> 406
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-D4

<400> 3731

cacgcgtccg aaactttctg cgggtgattc tggtgagaag ttgaactccg tttttgc当地 60
aattgaagga ctggagtctt ggtctgtcga gccaaggta ttgatgtga atattatgaa 120
aaggtggatt gactcaaggg agaatgaatg ggcgacactc gatgccttgc aaaactctcg 180
agccagaatt tcagagttgg aagccgaagt gaaacaactt tgtcatcaa ttaagctgtt 240
ggagttggaa aatgatcgtc gactaactga acaatccttgc aaacatatga atcagagtt 300

tgtaaatgaa gaaaatgtta gtgacgttt tatgacgaca agtgattcat ccaacgttgt 360
tcaagacgac gacgaacatc cagatacgat catccctgca actcga 406

<210> 3732
<211> 346
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-D5

<400> 3732

ccacgcgtcc gcagacgcgt gggcggacgc gtggcggac gcgtgggtt agatcactaa 60
agacggtgtg ggcagaacac ttgagcgatg agtgtaaacg ccgcatttac aaaaattgg 120
acaagagcaa gaagaaggct ttcacgaaat acgcaaaggta caagtatcaa aaaggtggag 180
aaagcatcaa aagagacttg gagaagatta agaaatactg taccgttatt cgtgttcttg 240
cgcatactca aatgagaaaa ttgaacattt gacaaaagaa agcccacatc gcagaaatac 300
aagtgaacgg tggAACGACC gcagaaaagg tcgactttgc tacggg 346

<210> 3733
<211> 415
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-D6

<400> 3733

gggtcgaccc acgcatccgc ccacgcgtcc gcccacgcgt ccgcacgcgt gtccggca 60
ctcaactagg ttcttttaag aatgagattt ttccagtgtac actgagtgtat ggcaccgtt 120
ttgatgccga tgaagaagta cagagattca aacaagtggta tcgttagga gaattgaaga 180
cggtatttaa gaaacaaaaat ggaacagtaa ctgctggaaa ctcgagcaag ttgagcgatg 240
gagctgctgc attagtgtt gcaagtggcc aagcagttcg agaatatggt ttgaagccac 300
ttgcgaagat tataagttt gcagatggag aacaagctcc tattcgattt ccaacaactc 360
ctgcaaaggc agtcaagtta gcactagaaa gagccaaact tgccgtcaaa gatgt 415

<210> 3734
<211> 79
<212> DNA

<213> Cyanidium caldarium
<223> Clone ID: LIB190-005-Q1-E1-D7
<400> 3734

ttcccggtc cacccacgct tccgaattgt cttctggta ctataaagag ttgagtat 60
catgttcaag tccttattc 79

<210> 3735
<211> 278
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-005-Q1-E1-E3
<400> 3735

tagccgtccg aaattcacgg gtccacccac gcgtccgcca acgcgtccgc ccacgcgtcc 60
gagccaaattt ggtgcagatc actttggtgc agtattgcca gtgtcagtag aagaaacata 120
acaagtccaa gctctttgga ctctatttt atttctatct agactggcaa tgtaaataga 180
actgagagtg tcaagttacc ccttttgc ggttagagat gacaatgggg gttgcgttac 240
caagacggca agtctacgca gtcgtcgaca caagaaaa 278

<210> 3736
<211> 370
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-005-Q1-E1-E4
<400> 3736

tagcgggtccg taattcacgg gtccacccac gcgtccgac acgcgtccgc ccacgcgtcc 60
gccccacgcgt ccccccacgc gtccggata ttactttgga aagcgacctg aagattggaa 120
gtattgcaga cttgttggaa tggtattcat agttgccgt gaatgtattc gaaagttgg 180
aacccaaactt ttgttggta atcctatttc ttgtatcctc tttgctgttc ttagttggaa 240
gttttttcgc gatcgaatcc gatggaaaga agagacactc gttggccttt atgggttca 300
gtttcaggaa aagtatcgaa acaaagttt gagtggaaatt cttttat 360
tgccgattgg 370

<210> 3737
<211> 449
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-005-Q1-E1-E8

<400> 3737

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ttaaggttag agaatggacg ataaggaact aggcaaaagg atatggtatac tgcggtagaa 120
catatgaaag aagcagcacc gactgttag caaaaacaca gcactctgca gaaaagagaa 180
aatgtaaagt atagagtgtg cggcctgcca aatagtagag aagaaatcga tgaaagtcaa 240
agcgagtaaa agatgaggtta tagagaatgg cggtcctaact agtaaggatc caaaggtac 300
gaagtaataa gacgttgaa aggcgtccag tatgaaagga gaaacgagtg tagcactgtc 360
tagtcgtcca actcagcgaa acagcaataa ctgtaaaaat gcagtaaact agcagtagga 420
cgggaaagac ccataattct tgactagat 449

<210> 3738
<211> 452
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-E9

<400> 3738

gcatccagta taaaaggaga aacgagtgtta gcactgtcta gtcgtccaaac tcagcgaaaac 60
aataactgtg aaaatgcagt aaactagcag taggacggaa agacccata attcttgact 120
agataggttt agggaggaga gagaatcatg aagttagagga ggtgggtaa gagatgaaaag 180
accactgcat gaggataagg aatctaactg agtaaggaaa ataagctaa gctagttgg 240
ctgggaaagt aaagcctaag aaagagtaaa tttaggcaagc aaaggcatga gagaagtata 300
atagcagaag catgcttgaa gaaaaagaaa gagattcag aaaggaaaga aaagtcagct 360
atagagaaca ggtgaaggag aactcaaaaa gaggagagca ccgaacgatc gaagaagaaa 420
ctttgggggt aacacgttaa agtgggtta aa 452

<210> 3739
<211> 480
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-F12

<400> 3739

tagccgtccg agattccagg gtccacccac gcgtccgcac tctggaaagg ttgttgtga 60
acgtgaaact ggtcgcccc gtggtttgg tttcgatcc tatgcagaag gtcctccgt 120
agacgaatgc attgccgcac tggatggcaa ggatatgcaa ggacgcacta ttcgtgtgaa 180
caaggcaatg tctcgtgaac aacgcgagag tggaggagac tttcgtcgct gtggcgtgg 240
acgatacggg ggtttcggtt ccggccctta tgagagacgt gaacgtgact ctgatcgtag 300
aagagatcat gacaggagag ataacggcca tagtagccga ggtcgactg gaggtttccg 360
ccgtcgtgaa gacttgatt gagagtattt gtgaagtctt ttattgttgg ttgcctatac 420
tagaaactag ctatacgcat ttgtttccag taaagtttg gataaattgc tcattcaaaa 480

<210> 3740
<211> 360
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-F2

<400> 3740

ggtcgcaccc acgcgtccga attgttgtgg ctatgtacgg ttacgggtt cgttgcgtgt 60
gaacgcgaac aacaagtggc gcgacttgcg aaaagaaacc atttgtctcg agaagaagcc 120
ttgcaacgaa tcgattcccc aatgccttta caagaaaaag tacgttggc aaatttcgtg 180
gtggacaact ccggaaactt ggcgttatta gagaaacaag tgaatgaact ttggcaacaa 240
ttagagcaca ttcgtattcg aagattgcgt cgattcaagt tggttggatg ggctgggtta 300
ggtgcccttg tggatttat ttccatggga ctgttcagga aataggagaa aaagaaaata 360

<210> 3741
<211> 423
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-F3

<400> 3741

ccacgcgtcc ggaggttct cgtagctta ttgaatcgaa acaaaaagct cgtttacata 60
gtgaagctaa tagaaactgt cataaaagtgg ctgtaactgg aagctggaga agagaagaga 120
ttccatcgaa ccacagtgtg ttcgatacag cttacgaaag tatagtcagt aatctacgag 180
atgaagctag cgccgaccaa agtgaagaat tcaagaggct tttaaagtcc atagagacat 240
ttgaagaagg agaagtagtt tcctcagtct tgccaaccga tgagaaacag tttatttgcc 300
cccttcaca aaagctacta gttgaacctg tgaaaaataa ggagtgtctt catacgatt 360
cgaaagaagc attagtgaca tatttgaaaa acgacaaaaa ctcaaaaaac aaactcgcaa 420
gct 423

<210> 3742
<211> 351
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-F5

<400> 3742

ggtccaccca cgcatccgca gacgcgtggg cggacgcgtg ggccggacgcg tggcgacta 60
.gactcgtgga ttggaaggag tagcagtgaa tattccaaag gtggcaactc ttctccagaa 120
gggggttcat ctcctaaatt gggtagcagt cttcgaaac taagcaaaag tcctcgcgct 180
caagaagttt ggagtaaaac agtgcaccc tggggcggtt cttactcagg aaaaaaacgt 240
tatgacaccc tggagaagga cacagagaag gaaccaagta tattttagat acatgatctg 300
tccaagaaac agagcggcag ccagtaagaa gagagtttgt gagtttcaa t 351

<210> 3743
<211> 420
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-F6

<400> 3743

gggtcgaccc acgcacccgg cataaaattt ccgaaagtat cccagtggaa gaaggtggtg 60
aggaggtcga gtcggtacgt gaggaagaaa ccaacgtgga aaataatgaa caagatacaa 120

cgaagcaaga agaagaagaa attgtttcca agtttgcgg ttccaggca gtacctggtt 180
cttcgaaagc atcgagtaag gtagcaaga tggcgaaaa gggaggtaaa aagagtagga 240
aaactgctac aaagaaatga agtactcgat cttccatgca ctcttgccaa tgtcatttg 300
tgcattcatt ggaacacttc atttggcaag tcataaaacg catttttca ctccaatttg 360
gattgactcc tccccgtcct tccatggAAC caaataaatt tgttgcgatt attgtcgttc 420

<210> 3744
<211> 384
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-G10

<400> 3744

gccacccacg cgtccgcaca cgcgaccggg agcagtgatt gttgccatgg ttttgttga 60
catgatttcg aagctgatag aaaaagctcg agcaccaaca gagcaagaag tggagcagga 120
agcaaaagac aggatctatc gacgctatga acaaagttag ctgggtcgat atatgtggag 180
ttctcctgtg aaaccaccaa actggtgaa gtccggatgcc tttcaagaaa attataagca 240
attgtgtcac agacataagc agcgccctcaa gacccctgca gagcgaacgc tagaagatata 300
ggaagaaaatg taaagaccta gtgccttg gtaccgcaag ggagtagtaa caatgggttt 360
gcaaccagtt ggagtttcct tgtt 384

<210> 3745
<211> 430
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-G12

<400> 3745

tatgcacagg atagacaatt tcatttgaa tgtattgtca tccattttta ggcttgagag 60
ttttcgtct ttgttatgtt ttttggttt gtatatgttt cctgtatttt ccaccttgg 120
tactttctta cttcctcgtc cattatctgt gaacagctt tggttcttat tattgtatgt 180
ccattttgg agttggcagc atgcagataa tcgatggaaa agagtgttt cgccgtatct 240
tataccgctt cactttcttag ttttcgatt ttcacatttg actgtatgtt attaactaac 300

ctcaatggaa aggattctct tggctttctt gttgtgtatc gttcgcagcg gagatatact 360
gacaagagaa gttctccttg tggtgttat acaatatata ttcttagagt ggatacagag 420
tcagcctctg 430

<210> 3746
<211> 356
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-005-Q1-E1-G5
<400> 3746

cggtccac cacgcgtccg cattgattgc tcgacgaggc gcagaatgtt ctgtcggtt 60
aaacttgtt actgttgata accctgtata agagcagttc aagtttgca tctttgata 120
agaccatagt gaatataacg gataatattc tttgctcaa gaaaagcaac ttggaggagt 180
tgcggataag agtgtatgga ggacgcaagg caaaaccttg tggtaacaa ctgtatatg 240
gaatacgact agggagaaag gaggagttt tcttcccaca aaacactaga ggctctgtt 300
acgttacgga ggcaagaagg acgaaggcgt tccaaagtgt tggaacccca tttgtg 356

<210> 3747
<211> 466
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-005-Q1-E1-G6
<400> 3747

gggtccaccc acgcgtccgc acacgcgtcc gccctcggtcc ctgcgtct cctccaacga 60
gtacaaaaac ataaaaataga aatggcaac ttactatcc aaaaaaagaa gagcagtagc 120
cgacgggtt ttcaaagcag aactaacga gttctgtatcg cgagaattgt cggaagaggg 180
atactctggt gtagaagtga aacccacgcc gttgcgaacg gaaatcgtga tccgagctac 240
cagaacacaa aacgtgttgg gagaaaaagg tcgaaggatt agagaactca ctgcgttgg 300
acagaagcga ttccgttttc ctgaaggaac agtggaaactt tatgcggaaa aggttgcgga 360
tagaggttta tggccattt cgcaagcaca aagtttgcgg tacaagttgt tgggtggatt 420
ggctgtgcgt agagcttggt agggcgtcct acgatttgcgt atggaa 466

<210> 3748
<211> 226
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-G7

<400> 3748

cctttagtg gccacaggac tggagattta tggatgttgc cagacatttc tagatacttt 60
gaaatacaag tcttagcaagt ttccatcggt tagcatatgt tgatgaatag catcgtttgg 120
tattcttgtt tggttgttta atttcttctg ggtggactgt tgcaaatatgt atatggaaat 180
aaaaatatttgc tcaaaaataaa tacttttgc tttggatgttgc agatac 226

<210> 3749
<211> 311
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-H4

<400> 3749

gcgtccgcac acgcgtccgc ccacgcgtcc gctggattta tggatgttgc aacttttgt 60
aagctgatttgc ctggatgttgc taatgagtgg ggctactcca atcgtgttgttgc agatgggtt 120
caccatatgg cgaaagtttgc tggatgttgc taactctgttgc tttcttgttgc tttttcgtt 180
tattgtttgttgc tttgttgc agatgaaatg tggatgttgc tccataaaaaa gttgtgtgc 240
ctgtgaaaaaa aaaaaaaaaaa aaaaaaaaaaa gacaaaaaaaaaa aaaaaaaaaaa aaaaacaaac 300
aacagacagg g 311

<210> 3750
<211> 440
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-H5

<400> 3750

ggggccaccc acgcgtccgc aaggaagtttgc aaggaggaa tggatgttgc ttatggcaaa 60
aacacgttgc acgacgttgc gtaaaacgttgc tggatgttgc gtagacgttgc agaactgggt 120

gtaaaggctcg agtagtagag taagtgtaaa agggaaagga aaggagagaa agaggaaagg 180
gatgaaatgc agagatctct agagaaaggc aagaaagaaa agaaaggaag acacagtaaa 240
tgaggcgaga aagcatagga agtgaaacgg attaggaacc cgtgttgtct atgcagtaaa 300
agaaagaatg agtaagaaaa aagggagtca ttccaccagg ggagtaaagg cgcaagaaag 360
aacccaaagc aattgacggg aatcgaaaaa acgggtggat cacgtaaatt aatccgatat 420
aaaccgagaa ctttacacct 440

<210> 3751
<211> 360
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-H6

<400> 3751

ccgggtccac ccacgcgtcc ggacaagcgt cgtgacagaa gcaccaccga ctgtttacca 60.
caaacgcagc actctgcaca ttagacaaaa tgtaaagtgg acaatgtgcg gcctgccaaa 120
tcgtcaagac cagctccatc acagtgaaag ctagtaaaag atcaggtata tagaatggcg 180
gtcacaactg tcaggatcca gaggtagcca cctacacaga cgtctgatag gcgtccagta 240
cgaaatgaga gactactgta gcatagtcta gtcatgtatc taatcgagac accagtacac 300
tgtgaaaacg caatgaactg gcactaggac ggaatgaccc cacacatctt gactataaaa 360

<210> 3752
<211> 362
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-A10

<400> 3752

gtatgacatg atttcgaagc tgaaagaaaa agctcgagca ccagcatagc atgaactgga 60
gcaggaatca aaagacagga tctatcgacg ctatgaccaa agtgagctgg tgcaatata 120
gtggagttct cctgtgaaac caccaacctg gtggaaatcg gatgccttc atgaaaatta 180
taagcatttgc tgcacagac atagagcagc gcctcaagac ccactgcata gcgaaatctc 240
taagatatgg cagaaatgta aagactttac agccttttgtt atcgcacggg agtactaaca 300

atgggtttgc aaccagttgg agtttccttg atctatgac acttattata aacaatttat 360

tg 362

<210> 3753

<211> 408

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-A2

<400> 3753

ccgggtccgag attcacgggt cgcccgacgc gtccgccaac gcatccggga gacccaaatt 60

aagggtgagag aatggacgat aaggaactag gcaaaaggat atggtatctg cggtagaaca 120

tatgaaaagaa gcagcaccga ctgttttagca aaaacacagc actctgcaga aaagagaaaa 180

tgtaaaagtat agagtgtgcg gcctgccaaa tagtagagaa gaaatcgatg aaagtgaaag 240

cggataaaag atgaggtata gagaatggcg gtcctaacgg taaggatcca aaggttagcga 300

agtaaataga cgtttggaaag gcgtccagta tggaaaggaga aacgagtgtta acactgtcta 360

gtcgtcaaac tcagcgaaac agcaataact gtggaaatgc agtaaact 408

<210> 3754

<211> 403

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-006-Q1-E1-A4

<400> 3754

gggtcgacgc acgcgtccgg attgaaaaggc gtccagtatg aaaggagaaaa ggagacccaa 60

attaagggtga gagaatggac gataaggaac taggcaaaag gatatggat ctgcggtaga 120

acatatgaaa gaaggcagcac cgactgtta gcaaaaacac agcactctgc agaaaagaga 180

aatgtaaat tatagagtgt gcggcctgcc aaatagttaga gaagaaatcg atgaaagtga 240

aagcgagtaa aagatgaggt atagagaatg gcggtcctaa cagtaaggat ccaaaggtag 300

cgaagtaaat agacgtttga aaggcgtcca gtatgaaagg agaaacgagt gtagcactgt 360

ctagtcgtcn aactcagcga aacagcaata actgtgaaaa tgc 403

<210> 3755
<211> 438
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-A5

<400> 3755

tgcggggc caccacgca tccggagagg aacaatatct gcttggccag tctcaaagaa 60
ccttcataaa gtatccaaat tataagaaac ttataacgag tagcaacata acactgtgta 120
ttctcctgtg cttttccta gtagtatttc gtaacactgc gggctttgtc tcacctgtct 180
atagaaaaaa ctctggtaca agtgctgcct tgcttctcgatcttccatct tttcaaaaatg 240
gcacccgtat acctaagaaa tacggctgtg attattgtga acaagccgca agctctgtgc 300
cgctgacttg gagggtaaac ctctaggac aatacgttta gtgacagttt cagttgcaag 360
gagttagttt cagagctgac aatacctttt tgtagtttgc acacgatcca gatgctatta 420
gtgttactgg attggatt 438

<210> 3756
<211> 357
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-006-Q1-E1-A6

<400> 3756

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gcaacgactg gtgggttgtt ggtgaaggag cacaagtgtt gcattgttgt tcaatactgt 120
ttgtaatagt agcagtgaga gtatcatgac gagtagtaac agtggtagtg ctcatcaaca 180
agccaaggat tgggtggagt ccattagcaa aaatgagtgg acaaaggctg cagctgctgt 240
ggcaggaact ttggcctcct tgggactgtat aagaatgtat tctaattggac ctgttatataa 300
aaattccgtc aacttgaagg gcanagtagt tggtagtgaca ggtgccaata caggcat 357

<210> 3757
<211> 425
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-A7

<400> 3757

ggggccaccc acgcgtccgg aaagaaaaga gaatatccaa tatagtattt atggaatgg 60
gagaacctct tcataatatac gacaacgtcc taaggctat tgagatactt ttggatgaac 120
aaggccttca tctatccat aacaaagtaa cagttcaac ttcaggttt gtacctgaaa 180
tggagcgact tgcaaaagaa accaatgtca acatcgact gtcattgaat gcgacaaccg 240
atcaagttcg cgaccagttg atgccatca accgcaaata tcccatccaa gttctttaa 300
atacagcgag acgaatttac accaacgaac gaagcggtca aaaactttc gtcgaatatg 360
tcatgttggc cggtgtaat gatagtatcg aggatgccaa acgactgcat atgttattgg 420
ctggg 425

<210> 3758

<211> 496

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-006-Q1-E1-A8

<400> 3758

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ggacctttc agttattgca agattccgcc agcagtgaat cagattgaaa tgcattccgtt 120
ttatgcaaga acagatctgc tcgaattttt taagagtcgt ggagttcatg tgactgctta 180
ttctccctttt gggagcggta aacatggtcc gcttcaagat gagacagttt caaagattgc 240
caagaaacat ggaaggacac ctgctcaggat attgatccga tggtgtctac aacgtgggtt 300
ttccgttattt ccaaagagcg taaagaaaga acgtatcaag gaaaactttt atgttttattt 360
cgaatttgagt ccacaggata tgaaggaatt gnngagcctt agatagaaca taatcctcaa 420
tcatcaaaag gaatattggg gttccaatat ccagccttga aagattttt gccgtacaat 480
aaacaaattt ctgtttt 496

<210> 3759

<211> 468

<212> DNA

<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-006-Q1-E1-B2

<400> 3759

cgggtccgtaa ttacacgggtg cccgcacgcg tccgcacacg catccgccc a cgcgtccggc 60
agcatgatga agagcgctat gaagttctt gtatttagca ttatTTTGGC aaatgttgtt 120
cttactattc aagcagcaac ggTTTGGAG acTTGGAGT cactgaaata tacagagtat 180
cttgacatgg taaaggctgc aggccTggac tcgaagttca acgactctgc tggcacatgg 240
actgttttg cagcaaaca tactggagtc aatgccacct tggcaccaaa gcacttggtt 300
atTTCTAATA tcacatctaa tgcgacggag agcaaagaca ttgtgaaata tactttgtt 360
caacataactc ttttgtcaga tgaTattaag acaggaacaa ctatcTTAC CGCCGTANAC 420
ggaatgaatt tgactgtggtaa gaaatacg acacgaatat ttgtaaat 468

<210> 3760
<211> 450
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-B3

<400> 3760

ttcacgggtc gcccgacgcg tccgagacaa aaattttatg gaaaagttc aaaaactgga 60
gaagatcggt gaaggcactt atggagttgt atacaaagca aaagacaaat atacaggaga 120
actcgTTGCA ctgaagaaga taaggctgga acacgaggaa gaaggagtac cttctacagc 180
aattcgcgaa attccatat tgaaggaaatt gcaacatcca aacattgtga ggtaagcatg 240
gagtgatgag agttcttga gtatattcgt tggcagact tcgagatgtg atccacctgg 300
actccaaact atatctggtg ttcgagttac tggaaacaaga tttgaaacat tttatggata 360
gtttaccccc tggaaagcta gaccctttc taatcaaata ttattgtat cagcttctga 420
atggTTTGGC gtattgtcac gcaaacggta 450

<210> 3761
<211> 354
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-006-Q1-E1-B4

<400> 3761

ggtcgaccga cccgtccgcg gacgcattggg cgacgcgtg gggcggttggaa tcccaatata 60
ctcgtaccag cgtggtatcg agacaatgtg caaaaacttt tgccgttggtt atcccttttg 120
ttcgaggat agttagatag ttgttggaa atggtaaac gagttgaaga ctggaaacata 180
tatatatagc gtttggaaaca agaacatgtg gtatgttata cgaaagagga tttcgatagc 240
catatagatg atagcattca ggtangtgtt tgatagatgt tacttggat atactttgtt 300
tttaaagata gcgatagcac aagataacaag aactagaaaa atggaaacaa aaat 354

<210> 3762
<211> 253
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-B6

<400> 3762

gaaataaagc acgaaacagg ttttatttcg tcgcactgaa gaactcacaa actcagtgtt 60
gagaatccaa ttgtttcca tcacacgaaa atttcagact ctccaaactc tgcattggaa 120
tcgaagccac caaaggcagg ctgctcatta aaagaaggcc atgatggata ggatggat 180
tgagggaaatt ccacatagga tgtgttaagaa ggagcgtaaa aatagctagg cgaaggat 240
ccctttgagt aat 253

<210> 3763
<211> 448
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-B7

<400> 3763

gtaccgatcc gagattcccg gggccaccca cgcgtccgcc aacgcgtccg gtgaggttggaa 60
aaaattcttt gtgttggtaa atggaccctc gttattatcc tgtcaatact gttccagaac 120
caagtgtcc tactgaaagt tcctcgaaa cttttagcaa cacttatcat cccattcata 180

accaacaaaa cctacagtat aacaggagac caccccttt gaacactaat ttcttggata 240
caaaatccag taatctgcat caaaacgtcg ctgtacatag ccctactcca ggcttcaacg 300
actactacac aagtcaacac agcaacgagg agaatgagag aaccaaagaa ttggttcgat 360
ggaaggacga gttgttctct ggtctattt taggcttaac gtttcttgt acttgtatac 420
ttgtgtggag tgcttgggac acagctac 448

<210> 3764

<211> 454

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-006-Q1-E1-B8

<400> 3764

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cgttttcca gtttgctac ggtctgttgg gtatctttt caagtggcaa caaaagttgt 120
ggtatattga agatgcttc aatctattt tctggcctt gtgggggtt ggtgctatcg 180
ttgctaccgc tgcaagacca tcgactggaa tgctcaactt gcacaacaac aggacagaag 240
tgaatgccgt ggaggctttt ttgtggggaa atatgtgtct ctatttcttc aatatattct 300
tggtgttctt tatctattgg gttggtaaa ctgggggtt ggatcctact gttgcagact 360
atcgcttattt gacttcattt ggaaaaggac aactggggaa ggaagctcag ttgcatttgc 420
atantcccta agaagaagca atgttgggtt gttg 454

<210> 3765

<211> 469

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-006-Q1-E1-B9

<400> 3765

cctgcccgtt caggtccgaa attcncccccc acacccacgc gtccgaattt gctaagcaag 60
cagagaaaaaa gttacaactt gccaatttgt tggaaacaa acctcccaa gtcagagaaa 120
ccagtacagt agcagtttat gatttgaagc cttggaaagag agaagacgac gatgtccaa 180

ctttatcaga aataaggtaa aagaatttcg agcagcagca acagaatgct gtaaataata 240
tgaataatag aaaggataac aagaacaaga cagtagatat gaccaaagag ttttttaggg 300
agcctccaag acgtggaaga ggagggaaata gtcgcgtat tggagggaat aggagaggag 360
gaagaggaaa aaccggtcct ccaaataactt ccaataataa ctatcgacgt gaagaaggaa 420
tagtggagaaga agcaagaaat gatcatagac gagctgcttc tcgatcgag 469

<210> 3766

<211> 483

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-C11

<400> 3766

cctgccgta caggtccgaa attcccggt ccacccacgc gtccgcagac gcgtggaaa 60
agaattggat ataataacat gatatactcc gaagatgaag tagaacgtat tggccgttgt 120
gctttcaag tggcacgtca gcgtaaaggt cgactatgtt ctgtggacaa gtctaatttg 180
ttagatgtca gccaattatg gcgagaagta atcgttcct tgtcaaaaga atatcctgat 240
gtggaactga ctcatatgta cgtggataat gcggcaatgc aattgattcg caatcctcg 300
cagttgata ctattgtac tggaaatctg tttggagata tattatctga tgaagcttct 360
atgttggttg gttctttagg aatgttacca tctgcttctt taggagaagg caatcgcca 420
ggagtatttgc aacctgttca tggttcagct cctgatatttgc tggtcagga caaagccat 480
cca 483

<210> 3767

<211> 321

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-C2

<400> 3767

ttcacgggtg ccccccacgcg tccgaaattt tcggcaaattt gtcagtagat gccaaactact 60
tgtgtcctat agttcggtg gggctagtt tgataatagc tttgctactt tttgtgtttc 120
taaggagctt ttttgggttc tgagaaacgt tgctgttgct tgaattcgcc tctggcttta 180

agaatctaact gtatcgtag actacttatt gacactggca gtaatttgac tagtcctgct 240
ttgggttatga tctcgttatc tttagcaagt cctttatcta cagtgtgaa tattttgcaa 300
aataaaaactt ccgtttcttc g 321

<210> 3768
<211> 442
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-C3

<400> 3768

ccggtcgtta gttcacgggt cgccccacgc gtccgccagt cgtgggtgt gtggtcattt 60
ttccccatcca aaaaaagatg atggacagca agttattggc catcgtaaaa ctttgtgcta 120
ccaacgatat cgaagccaaac tttagaaatt gtgcaagtct tattcatcaa gctgttgttc 180
aagggtgctcg tttcgtgagt cttcccgagt gtttcgagta tataggcgcc acacccaaag 240
atgcgccttc catagctcaa cctttggacg gccctttatt ttctcgctat agagaattgg 300
ctgtgaaaaga acaagtttgg ctgtcattag caggtttcca cgaacgaggg ccggatgacg 360
ctcacatcta taattcgcag gtcgtagttgg atccttagagg gtccatagtt gctgtttatc 420
gcaagttgca ctgtttgtat gt 442

<210> 3769
<211> 464
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-006-Q1-E1-C6

<400> 3769

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ctggaccagc aaaaagttga tacagattca actagtcttgc cagaagtaca actatttcca 120
gccatagaag aaaccaaatt tccaaaggct attcgaccaa aaggaaatga gacttcacca 180
caaagcgaag catatgctgt acaactattt cgaagtatga gaaaagctt actaacttca 240
ccattatatg cgaatgatata ttccaggaaa gtgtctaagc gacagatata tacttacagt 300
gacttgatac tcaacaatac tgaaaacgca aaacctcgcc tgtttgagga atcaacttgg 360

ttgaaaacca aagtacttca aacttccttc ntcctagtca acggaataat aatacaacta 420
gagaaaggc aaagaaaaaga aaaactttgt cttcaaccaa tata 464

<210> 3770
<211> 338
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-006-Q1-E1-C8
<400> 3770

ggggccaccc acgcgtccgg accgcccttt ttttttttt ttcctactct cttctacttc 60
tcctgcttat tccttagcaca cttccagaac ttgacgggcgtgtgtacaa aatccgttca 120
cgctttcacc gaagttttt cttcctcgat tacttggat tcctccttcc ttcacgctcc 180
ttcctcgtgc ttctcttgtt tggacctttt ctca gtttcca atgtggctt cctcctctca 240
gattcccgct ttacttcct ttatggttt tactctaacc atttcttaca ttcttctgtg 300
ctttcatgtt cttccactct ttcacacccctc tttacgac 338

<210> 3771
<211> 463
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-006-Q1-E1-C9
<400> 3771

cctgccgta caggtccgaa attcccggtt ccacccacgc gtccgcaggc ttttagaaagag 60
tctcgcttg ccogatgctgc gaatgaaaag caacgtttgg aagaaaaaca aagagctgct 120
agaaaagatga gagaagagcg agggaaagaa tattctccat tatggttga ctggaaatat 180
gaccaagtca ccgaaaagta cgattggaag ttaatggcaa atattatatt catcgcaaag 240
aaaagaaaatg ggacatatgt ccggatttgt tctgaagagc tgccgatttag aattgagcaa 300
ttctgtcgag caagtccctc gaaagatagc aactcgtgtc gtatgcgttt ttcatttccg 360
ttgctttgtt ggtttgtctg tataaagcgt ttgcattgtt cccatcaaaa aaaaaaaaaaa 420
aaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaggc cg 463

<210> 3774
<211> 411
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-006-Q1-E1-D2

<400> 3774

tgcacgggtg ccccccacgctg tccggaaata ccaaggaagg ggagagttgg aaaaggagac 60
ttggcaccaa tgactgaaat tacttccaaa gtggaaagaa aaacaacaac agcagcactt 120
ggagaacttc cacaaaatat tttgttttgtt ggattggcag gagtattggg tacaagtatt 180
atttttcctc tttatacgat aaagaccaac ttgcaaagta gccattcaca ctacagctat 240
tccaccacat cgagaacaag tttggctttt atttcccaac agtgaaaaat aggcaagtgt 300
attcgttcca ttatangaag agaaggttgg aaaggaatgt atcgaggtct tactcccacg 360
ttgctangag ttgcacccga naaaggcatc anactatctg tcaatgatat g 411

<210> 3775
<211> 353
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-D5

<400> 3775

tccgggtgcc cccacgcgtc cgaccgaact tacatcgat cacgcaccga ccgttacaga 60
tgagggaaatt gaagccatcg tacaagaaga attgagtttg ttgcgaagc agacggagaa 120
acataaaacaa attacgacat gactttataa aataaatctt ggaatcggttgg gaagaaaaaa 180
aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa 240
aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaaag ggggggccccgc ccaaaaggat caaagcttac 300
ttacgcgtga atgcaacgtc aaacccttc aaaagtgtca ccaaaattca att 353

<210> 3776
<211> 432
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-D7

<400> 3776

ccacgcgtcc gccaacgcgt ccgcggacgc gtgggcaagc tcaatttcaa aaaagtgcac 60
ttgttggttg agcgcgcg cgcgaaatga gcattcatga agagcagacg gttgccttga 120
gcaagctaga gtgttaccca aagtttagtt ctgagttgt tacagaagct gcccaactat 180
tctcgctaa gaagtttgcc gaagctgctg acaagggttga ggcagcttgc aaagagctcg 240
atggttatca agaagagggaa aagcaaactt ggggtttgc cgagctgcag cttctttatg 300
ggagggtctct tctagaaatg ataaagtgtt ctgcttcaaa taatgtatgac atatttggtc 360
caaaaagtacc taaagtgcgtt gaactccaag gctctgactc tgaagaagca gaagaagaag 420
acgattttc cg 432

<210> 3777
<211> 480
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-D9

<400> 3777

cctgccggta caggtccgaa attcccggtt ccacccacgc gtccgcacac gcgtccgccc 60
acgcgtccgc ggacgcgtgg ggtcgccaa caacgacaac aacaacaaca tgtcgtggta 120
tcatcttcgg tttgggtttt acgggtttcg tgctttagaa gaaaaatgga tggataaaacg 180
tcaaatacgat gcgttgagac ttttattaca acgcaaattt agagatgcaa ctggaaaacg 240
tgcagagttt tggactcacg tagaacccaa cgtaccgggtt accaaaaagaa cagaaaaacg 300
tatgggaggt ggaaaaagtc ccatcaaagg ttggaaagga agagtaaaac aaggacaaat 360
attattcgaa tgggcagctc ctgtcgagat tccggtagaa gaaattcagt ccaagtgtag 420
tgttaggttg agaagtgtcg tggatcctgt ctatcatctc gttctatgc aacgaaaactg 480

<210> 3778
<211> 489
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-E3

<400> 3778

cggtccgtaa ttcacgggtg gccccacgc gtccgcaa ac gcatggtaa acttagaaat 60
ccaaatacat gtgaactaac agataaaaata ggtaaaagttg gtattgttaaaggcttaaga 120
ttaacagaat ctaatattat agtttgata gttgagttt attcacaagt aagaatatgg 180
tttttgagg atgaattaaa aattattaaa taaataatta tttaaattat aaaatatata 240
taagattata tgggatcaa tatagaaaaataaatattct tattacaaga actaaattta 300
gatTTTATC atattaaaac aaacaattat gaaattcggtt caaaaaaaaaa tgaatctttg 360
ctttatcaca attttatata taattttAAC atttattattt caacatttcc ttatttacaa 420
actaaaactc agaatgagtt atatcaaaat atagatggcc aaaataataa tgataaaaatt 480
tttacaacc 489

<210> 3779
<211> 222
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-E6

<400> 3779

ttcgcgggtc cacccacgcg tccgcatgca gaaatgaatc aaggtatgaa acagtacatg 60
ggagaaccaa agagtggaggc ttggcgacaa gtagaaagct atgtaaagga acataattct 120
tacaagcttt ccgatggttc tgcgttatt cgattgaaca atatcgcat tggcattgaa 180
gccgagccta ttgaataataa aaagcattgt ttgtttgtt cg 222

<210> 3780
<211> 461
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-E7

<400> 3780

ttcgcgggtc gccccacgcg tccgccaacg cgtccggcag gatatgttac aaaatgttcc 60
ggtaaggta ttactttgc agcgaaatcg ggacgtatgt gtgcagaagc tattgcggag 120
atttcttac aaggagaaaag aattccttcc gaatccgaac tgaaggcgac ttatctgaag 180
agatggata gcaagtattg gtcgacttac aaagtattgg atgtattaca agcagtattt 240

tatcgcaata atattgctcg ggaagcattt gtggaacttt gtgaagatga atatgtcaa 3.00
aagatgactt ttgattccta tctctacaag acagttgcc aaggaaatcc tttgcaagac 360
gtaagactat tgtttcatac attgggagct tttgccagag caccgcctt ggcaccttga 420
aaataaaaaaa gtgtgtcctg tgtgatgaat tggagtttat t 461

<210> 3781

<211> 454

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-E8

<400> 3781

ttccgggtcc acccacgcgt ccgcacacgc gtccgcgaag aagagttgt gaagcatcg 60
gatgccatga tcgatcatat gcgttttca agtttctga tggtaaaag ttaggtata 120
tctgtattct caccttattt ggatcctgct atgattgcat ttgccaagag ttgacaaaag 180
aaagaaaaata ttggggaaaa gtatatccat ggaaaagccc aaatatttg aaagctttg 240
ttacgogaag ctttcctca cgtcacttca tggagagaa acaaggagcc tattgaagt 300
ggaagtggta cgctgcctt gggaaatgga tatttgaac aacttgtaga tgattcgtcc 360
tttgctcgac aggtggatga aatatggaag cacgaaggcg tgtatattcg taccaaggaa 420
catttgggt attatcgaat atttcaacag caac 454

<210> 3782

<211> 363

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-F2

<400> 3782

cggtcgaga ttcacgggtg cccgcacgcg tccgcaaacg cgtccgccc cgctccgccc 60
cacgcgtccg ttatcgtttgc tcaaagtttgc gttgtttct tggtagcagt tgtacattca 120
acatcatcaa atgccaaagg gagaaagaa agattttca aagaaagaag ccacaagtaa 180
acctgcagca gcagatgcta caaagacgcg agaaaagtct ggtccgaaag ccaagttgaa 240
gggaactggc gcaaagaaac aataaaaaagt tgactatgca tgttcctgtt atgtttgtt 300

agttctgttt gatagtttcc agctattctt ttggtagtga ataaagagaa aattttttat 360

att 363

<210> 3783

<211> 420

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-F3

<400> 3783

gtaccgggcc gtagttcacc gggtgcccgc acgcgtccgg tatggggatt agttgttagtg 60

gtgttgtctt tgcgtgatac taggatggga ggtttcggct actttttaaa gtcaactttg 120

ttttctggca gacacccgga gattattccg ttggtttccg ctattgctct gtgtggagtt 180

tgtgcggttt ttgtgagcat cgacaacttg ttttataatc caaccgtgg agctctcaag 240

tcagagcggg aagcgtattc gcgcaatgag aggcaacgtg actatgaaga cagacccttt 300

ttgaagttgg tgaaaccact tcgtgaccgt cctatcagtt ttatccc aaatgatgaa 360

aatagcagga ttccattt gttggatagt acaataaata gttgttgagc ttatgttgg 420

<210> 3784

<211> 431

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-F4

<400> 3784

cgcttgctgt gacggtccga gattcacggg tcgccccacg cgtccgtact cttaaggat 60

gtaccgtcag tgcttgaaga gagtttcaa gagtcgtttc ttggcttcag aagcggggaa 120

atattggaaa ggaagcacaa ggtcttttc tagtcagct gggaccaga ggaatgattt 180

gaggtcttct gtaaagaagt tatctgttgc tgccagcgta ggtgctgctg tggctgcct 240

ttatggaaatt gaaagacaga ggagagcccc tatttcttgc aaggaggcag aaactagtgc 300

aaagggttcc gtgaattatg acaagggtcag agaagcaatt gtaaagatca ttgaagagga 360

tgataatatt gctcccacca tggtcgctt ggcttggcac tcttcggaa cttatgacaa 420

gaaaaccaac a 431

<210> 3785
<211> 455
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-F6

<400> 3785

ggtccaccca cgcggtccgcg ataaggaact aggcaaaagg atatggtatac tgcggtagaa 60
catatgaaag aagcagcacc gactgtttag caaaaacaca gcactctgca gaaaagagaa 120
aatgtaaagt atagagtgtg cggcctgcc aatagtagag aagaaatcga taaaagtgaa 180
agcgagtaaa agatgaggtt tagagaatgg cggtcctaac agtaaggatc caaaggtagc 240
gaagtaataa gacgtttgaa aggcgccag tatgaaagga gaaacgagtg tagcactgtc 300
tagtcgtcca actcagcgaa acagcaataa ctgtgaaaat gcagtaaact agcagtagga 360
cgaaaaagacc ccataattct tgactagata ggttaagga ggagagagaa tcataaagta 420
qaqqaggtgg ggtaagat gaaagaccac tgcac 455

<210> 3787
<211> 479
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-006-Q1-E1-F8

<400> 3787

ttccggggcc acccacgcgt ccggagattc ttggcgactc ctggatattt gtcgttgagc 60
agttgtttca ttgctacggc gttgaaaata agattctatc gagaagattg tatgtccaag 120
tcttagatttc atattacagt tggacattcc actgcagttg caaccgtAAC tttttctct 180
caaATGCAAA acggaAGCGG agatttCTCC tttaAGCAAC gatattttA tgagagacaa 240
ctggagaatg aagagtcgga ttctgtatcct cctagagtgt ttttcgttt gatcaagaca 300
gacgttcctt tatgtatTTA tccaaatgtt ggTTTcatag cgtctcgTTT ggattggat 360
acggaagtaa acagatgttag aattgcattt cacggacaag tagtggcgaa gatgcaaaat 420
gtggctgcag ctganaagat ggagacaaaa gatgacatgt tgcataCTTAC ncaagataa 479

<210> 3788
<211> 412
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-G1

<400> 3788

gtgacggtcc gtagataccg ggTCGACGCA CGCGTCCGCC AACGCGTCCG ATTGCGATG 60
gaacaaaaac ctatTTATA CTCATACTGG AGAAGTTCTT GCTCTTGGAG AGTCCGAATT 120
gcgttggcag tgaaaaatAT CGACTATGAA TACAAGGCTA TCAACTTGTT AAAGAACGGA 180
ggtgagcagt ggggatcgga gtatgagaga CTCAACCCAA GTCACACTGT GCCGACGTTG 240
gtcgtggacg gtcataCTAT TGGCAGTCA GTTGCCTTA TGGAGTACTT GGAAGAGACC 300
cggccacaag tgccCTTGTt ACCAAAGGAC CCGGCTCAGC GAGCAAAGT TCgtcAGGTA 360
gtagaaaacag taaatgcgga tacacaacca CTGCAAAtt TGAGGGTTCT GC 412

<210> 3789
<211> 383
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-G11

<400> 3789

cccggttca cccacgcac cgcacacttgc ttcttagggc aacttgcgg ggttttgttt 60
tggcgccatg gtggtatgca aatactttct tcgaggtAAC tgcaaatttgc gtcgaatttgc 120
taagaacgaa cacccatgc agaatgtgc ttccaacagt tttggtgctt ttcaaaaaga 180
gtggaggat cctttcatt ccggagcggg acagtcttct tcagtttca ataattttgg 240
aaaccgcagt gggaaaccaa cgagtcaaga tcctttcgt tcgttcaact ctctggaa 300
tggctttat cgtaaccagc gaaacaaagt tgctagggat atcacttcgt ccaacgcacg 360
tgcacgatgt cgtggtagag ttg 383

<210> 3790

<211> 440

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-006-Q1-E1-G3

<400> 3790

tacccgtccg tgattcacgg gtgcacccac gcgtccgcca acgcgtccgg ccagagggaa 60
aatgaatttt caggtgttgg aggtgcgtat tcccaagagt tggaaacaga acagcacttgc 120
gagacataaa cgtttaata gaagcaacac atataggaat cgctttta ttcataatat 180
gtcaggcctt gttgtcaca gagcacttat attaatagat cacggcagta aagttccaga 240
ggcaaacgac caaattgcca aagttgcctc tctagttgca aagcggcttc caaatacttt 300
tgttacttt gctcatatgg aattagcgaa acctgatttgc atggaggcatt tcactctatg 360
cgttgaaaat aatgcttagga acatcactgt ttgtccgttt ttcttgccc ctggaaaaca 420
ttgcactgta natataccgc 440

<210> 3791

<211> 427

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-G4

<400> 3791

ggtccgtaga ttcacggggc cacgcacgcg tccgcagcaa ggaacttcga caaactgttc 60

gagtcagat tggagccatt gctactcccg atgtcattca ttgggcaccc gctttaccga 120
aaacgagaag tgccaaggatt atgcgaagaa tttacgtaa aattgcagag aaaggaacgc 180
atgtctcttc ggatgaactt ggagatattt ctactttggc agagccacaa gtggttgctc 240
aacttattga attgtatgga aatgaatgt ggaaaaaaa ggttggtttta tttgtgtgtt 300
tggtgtgtg tggatgtgtg tggatgtgtt ctcttccttgc cctatctata 360
ttatagaata tgaggtatga tatatgaata gatagagaga aaaaatgaag aaaagatgtt 420
tcatttg 427

<210> 3792
<211> 403
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-G5

<400> 3792
ttccgggtcc acccacgcgt ccggaatgga gtacaacaaa gagagacgt gacttggatt 60
gtggatcaca cagcgatgc tttcttcatg aaagctcactg attcgatgag aaaaagttagt 120
gatgatattt gcacactact acttgggttt catcgaaaa ggtccgggtt tgcccacaac 180
aacacttgct gtgtttgct cgtgagagca ccactagtgg acatatccat ggtggtccta 240
cttaccagaa atgacactcg ctctgcacac ctgttgggt gatcctatgc ccctcactct 300
tatgtctctt gtgttggcaa aagacataaa ggtccttggt gctttatgg atgcgagcca 360
agggacacga gtctcggtt ctcaagtcca tggtaagtt gtg 403

<210> 3793
<211> 455
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-G8

<400> 3793
ggccacccca cgcaaccgaa aacacagcac tctgcagaaa agagaaaatg taaagtata 60
agtgtgcggc ctgccaata gtagagaaga aatcgatgaa agtggaaagcg agtaaaagat 120
gaggtataga gaatggcggt cctaacggta aggtccaaa ggtggcaag taaatagacg 180

tttcaaaggc gtccagtatg aaaggagaaa cgagtgtgc actgtctagt cgtccaaactc 240
agcgaaacag caataactgt gaaaatgcag taaacttagca gtaggacgga aagaccccatt 300
aattcttgac tagataggtt tagggaggag agagaatcat gaagtagagg aagtgggtt 360
agagatgaaa gaccactgca tgaggataag gaatctaact gagtaaggaa aataagctt 420
agctagttt gctggggaaa gtaagcctaa gaaag 455

<210> 3794

<211> 457

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-006-Q1-E1-G9

<400> 3794

gcctgcagta caggtccgaa attcccggt ccacccacgc gtccgaccaa agcaagttac 60
ctagtacccg atacacatac cgtttatcg attctggaaag cattggagac agacgatcat 120
gcgacagaaa gttagtaacc tgcaactttc aggtaatcga ctattttcc tacagccgtt 180
gcacactcgg cagcagatac aggtttggta aatatcgta tgatgagaca catattggtt 240
tgcatagcta caaagccatc gtcaccctat attgcaatga tcattatgca tacactctcc 300
tacatccata tatatacaca tacacacaca cagagaaagt gtgcgtatgt gtgtatggtg 360
cagagagaat gtgaaagaaa cattgttaga tataataatg aaaccaacga caaaaacttg 420
ccagttcnc ataaatagta tcttctgtcg aacgcac 457

<210> 3795

<211> 438

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-H2

<400> 3795

gcgggtccgag attcacgggg ccacccacgc gtccgcaaac tctgcgaagc gtgggtggag 60
agaccgaaca aatgataaaaa gtgcgactac gagaagagtg acggaaacta gtagaggaag 120
aggaagtggaa agagcaagag ctccattccg tggaaacaac ggacgaaatg agcgccctcc 180
aagagaaaagg aatattggaa gaaacgacaa gaaacctttc tctagaaaatg atcaaaggcc 240

gaagaggact cccaaagaag catcgaaaaa gaagcaacgt ggacctgctc ctaatttgc 300
ggatgattgc aaacataagt tgaccttta tttgccagca aacggccgct atcttcgtgc 360
ttggtagat cctggaagtg agtctcaaac accaaaaaga aacgacgctg gacatgtcaa 420
agttgcttt cgttcttc 438

<210> 3796
<211> 273
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-H6

<400> 3796

gggtccaccc acgcgatccg ggaaattgta ttgaagaagc aatcgaatct tgccgttgct 60
gcggatgtaa cgaccagtca agaattatta tccattgccca gtcaagttgg tccacatata 120
tgtgtttaa agacacatgt ggatattatc gaagattgga acgaacgtgt gtgtgagcaa 180
ctcgttcatt tggccaagtc gcatcagttt ttgatattt aagatcgcaa gtttgcagat 240
attggcaata cggttgagtt acaattcact ggc 273

<210> 3797
<211> 371
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-A4

<400> 3797

acccacgccc tccgaaaagg aatggcggag aaaaatcaaa caagttcct caaacgaaca 60
aaaaaacggc caaaaaacac aaaaagggt tttgaaaaaaaa aattttgcaa attttcccc 120
cttcaagggtt ttcaattcct cccatgagga agatgatgat gatggaggag ctttgaact 180
gtcctttctg gatttcattc cttgcttata actttgccaa aacttccaca acgtccgctt 240
ctttcttgc aactccagat tgcttcatg ttcctccaga tttgcggaaa atgtatttag 300
ttctatattc aaagtagatt cctacatgtc cttagttaa atcaaacgac gacgtccatt 360
gtatacgaaa a 371

<210> 3798
<211> 407
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-007-Q1-E1-B3

<400> 3798

attcncgagt cgacccacgc ctccgcccac gcgtacggga cttaaggga accctttcc 60
cctgttgggg ttactgttgg taaataatgg taaaaaatgg aatccaaatt gggataaag 120
ggtttggaa aatttggaaag gcaattccta aagctgcctt gggaaacaa tccgttaaag 180
ttgaaaccaa caaccattcc ttatgatt tgactaaaa ggtccaaaag ttcaaataat 240
gactctgttc accgggccta tccaagtaca gtggtagcaa agaaatggaa acttgcgtg 300
gatggacacg aaatggcagt gttgccttc cgtgacccta gtgagatccc ttggcctct 360
actggagcag aatatattgt ggaatcaaca ggagtattt ctgctgc 407

<210> 3799
<211> 407
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-B4

<400> 3799

cacccacgcg tccgaaaaga ttgccatagg aaattggacc aaaaccttt caaaaaattt 60
aagggttaagc ctccctccttc tcctcctcct ccctaaacct tcaataccaa caacaattac 120
tggaaaacct atttgttattt aggtttctgc gctattaaaa gaaggagatc gcgtattgaa 180
tgctattcga aagcatacag ttcctagtgg tatgtttaca gaggagattt atcgatatac 240
tggtttcgag caaggagcta tcaatttaac ttggagttat gatgccttg ttactgcgg 300
ttggtcgaga gaagatgttc acaagggttt ttctaaatat tgtgaacctc cttctccatc 360
tctacctagt atgccaggac ctggtggttt atcttctcca tagtaag 407

<210> 3800
<211> 484
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-007-Q1-E1-C11

<400> 3800

ggtccggata tcncgggacg gcccacgcgt ccgatggaag ttaggcaatg tttgcttgg 60
ttcatatgtc ttccagctct gtttaggttca actttggctg cttctgggtc aacgtctatt 120
tactcgttgc ttccagactaa aagagactat acttttacag tgcaaaggcat agagctggct 180
aatctaacag atgtatacaa cagcagtgtta ctggacttta ctttccttgc ttccaatgac 240
actgcttggaa aacaatccag agccaatgtc actgggtcac ttagtgcagc aaaacaaaac 300
gttaacaggag caatagcggtt tctagaacgc ttgatagcag caagcacagt gaataaaaacg 360
gtggagttta gtacgctctc tagtggtacg aaagagggtt tttctctggc atgtttgccg 420
cttaatttca cgaaaaattt tactggagac tttgtggaaag gtgattcggt ctctgctgct 480
gacg 484

<210> 3801
<211> 195
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-007-Q1-E1-D10

<400> 3801

ctgcgtctna cggccggat attccggac gagccacgcg tccgcccaca cgtccggag 60
agttggcatt tgaaaatatt gcacaagcgt ttgaagattt acatagtggaa aagctattc 120
gaacagtgtt gaaatattct cagaaaaaga aataaaaaaag aaagagagag agtgtgtgt 180
tgtgtgtctt aaaaa 195

<210> 3802
<211> 322
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-E7

<400> 3802

aggacgcgtg ggtttgggtt ttttcttgggt agcagttgtt cattcaacat catcaaatgc 60

caaagggagg aaagaaaat tcttcaaaga aagaagccac aagtaaacct gcagcagcag 120
atgctacaaa gacgacagaa aagtctggc cggaagccaa gttgaaggga actggtgcaa 180
agaaacaata aaaagttgac tatgcattgt cagtcctgtt atgttttgt agttctgtt 240
gatagttcc agctattctt ttggtagtga ataaagagaa aatttttat attaaaaaaa 300
gacaaaaaaaaaaa taaaaagaaaa ag 322

<210> 3803
<211> 440
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-007-Q1-E1-F3

<400> 3803

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caaaacacat tacaaaaaaag gatgcttggg ttgtgttggg cgaaaaata tatgacgtga 120
ctcgccccctt ggacgaacat ccgggtggag aagaagttct acttgaagtt gccgggcgtg 180
atgctacgag agagtttggaa gacgttggc actcggatga ggcaagagaa ctacgaaaca 240
agtatttcgt gggagtagtt cgtatgaaa cggaaagaaga atttggaaacga gcagaacgag 300
aaggaatcaa gccagtgcag tctgcgaacc aaccggaaagt acccttggg aagaaactgc 360
ttattcncgg tatttcgtt gttatggcct ttttggattcg aaagtatatt tcctaagaga 420
ctatTTTGTG acatTTTTT 440

<210> 3804
<211> 342
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-007-Q1-E1-F5

<400> 3804

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cttctttctta ctcccttc tcgtaaacct ttccttttc ttacctttta cttcccttc 120
cttggttcgc tactccaccc agcattctctt cttctttctt tgctcctctta cctcttaccc 180

tgattcggtc ctcttctat cctgttctc ttccacagac aacaaagtgc agactgttgt 240
gcatcttact gtgtgcctc ctttgctacc aatgcttatt tgcggtagaa tcttcgagca 300
atgcgtcttgc tancagctca atgataatac tgtgcttattt ga 342

<210> 3805
<211> 412
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-G1

<400> 3805

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gagttgcctc tttctctctt tccttatcgc tgccgcagtt gcagccgacg tagttcaga 120
ggagagatgg ggatatgctc agcaaaccctt acaacagcaa cagtgcacaa aagtatgtaa 180
acagtagca tactatcaga gtccagtcgt cacttccgtt accacacaga gcccatactg 240
gacccaatgc tcgaagactg tgcaaaccctt tgtcccaagc cagtgcagta cttataccca 300
atctccataca tggacctattt gcagcaccta caccaccactt agcgtaccat ctcaatgcag 360
caaggccgtt actacccata ctcaaaccctg ctgtgcttattt gccccaaacaaa ct 412

<210> 3806
<211> 416
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-G2

<400> 3806

cacccacgcgt tccgggtgaa ttattctgtt tcgtttactt gtcttttgt tgagttatca 60
tggcacgaac aaaacaaaca gcacgcaagt ctaccgggtgg taaggcacctt cgaaaggcagt 120
tggcaaccaa ggcagcaaga aaatccgcac ccgttaactgg aggagtgaag aagccccatc 180
gttaccgtcc cggtaactgtc gccctgagag aaattcgcaa gtaccagaag agcactgaac 240
ttcttatccg aaagttgcct ttccaaaggt tggttcgtt aattgctcaa gactttttaaga 300
cggtaccatcg ttccaaactt tggcggtga ctgcccttca agaaggctcg gaagcatact 360
tggtcgggttt gtttgaagat accaatctttt ggcgttca tgccaaacgtt gtaact 416

<210> 3807
<211> 370
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-007-Q1-E1-G3

<400> 3807

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taaaaagcaa caaacaaaaa agggaaacctt taaagcatga aaaaaaaaaa atccgaaaaa 120
aaaaagaaaa aggttaagaaa gaggaccgaa tcagggtaaag aagtananga gcaagaagag 180
aagagagaat gctgggtgga gtagcgaaac aagagaaggg aagtaaaagg taagaaagag 240
gaaaggttt a cgagagaagg aagtagaaag aagagagtgt aaggcggcgt cataatagaa 300
atccgaaagg agtagaagaa aagagagaga agaaagaaaa gaagagaaaa gccgtactga 360
agaccgacac 370

<210> 3808
<211> 440
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-G7

<400> 3808

cgccctgtcgg taccggtcct agattcccggttccac gtcacccac gcgtccgatt tgctgtttat 60
gtcgaagcgg ggcatctttt acaatgcgcc cttcaactgc agttctaaag tttcaaagtt 120
tctgtatact tgcaactgtaa ttttctggc ttttgatc ctatctctg tctatggaa 180
acctgtacca tcttacaatg aggccactca acggagggttc ttttacccca caagcaaccc 240
tactcggatc ccaagtatca tccaccaaag ttgaaagacc aacgacgtcc cagaaagata 300
caaaagatgg atacagagtt ggaaggaact gcatccaagc tggaaatata tactttggac 360
agaccgaaca aatagaaaaac ttgtgcttag acaattccct tggttgattg acatatatga 420
cagactgcca gtaaatattg 440

<210> 3809
<211> 440

<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-007-Q1-E1-G8
<400> 3809

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cacgcgtccg cgccggacata gaatggcaac agataaaagtc agctaagaag atataacttt 120
atgtaaaaaga atcaaaaacc aaagaatatt tggagctaga cgattcggt cagcagccag 180
tggattcatc ttgttagcacc aagtggctgt ttattgcaac cccactgttg gaagttgctt 240
gtactgatgg gcagcgaatt gaaatgattt ctttgaagaa agatataaag gaattgtttt 300
tctctacttt aaagaagaac tttgagtcga acgaagcgac atgggagtgc agtgttagttg 360
aaaccgcagt tgctgtttt atccagtatt atgaacagtg cgtgaaacag tactatctag 420
caggcaaaga ttatgagcta 440

<210> 3810
<211> 408
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-007-Q1-E1-H5
<400> 3810

accacgcgtc cggtgtgcgg cctgccaaat agtagagaag aaatcgatga aagtgaaagc 60
gagtaaaaga tgaggtatag agaatggcg tcctaacggt aaggatccaa aggttagcgaa 120
gtaaatagac gtttggaaagg cgtccagtat gaaaggagaa acgagtgca cactgtctag 180
tcgtccaaact cagcgaaaca gcaataactg tgaaaatgca gtaaaactagc agtaggacgg 240
aaagacccca taattcttga ctagataggt ttagggagga gagagaatca tgaagttagag 300
gaggtgggggt aagagatgaa agaccactgc atgaggataa ggaatctaac tgagtaagga 360
aaataagctt aagctagttt ggctggggaa gtaaagccta agaaagag 408

<210> 3811
<211> 352
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-007-Q1-E1-H8

<400> 3811

aagctccaac tcaagagcaa gatagacaga caacgcaaag gttgaaacga tgatcattt 60
aagggtccag gcgcaggagg caaactaaa agaccagttt gcaactgtcc agaagggtcca 120
tttccaaaag gtccctcctcc atatccaagc atcggagttt gctgagttgg ttgtaatccc 180
tgaagaacaa ccgaaggatc ctcgttgatt tgtgcttctt cagcttggc ctttccttc 240
ttacgctgaa gttgtgcagc tcttcgctt tctaacctac cgagtctcga ggtgagggtca 300
tgtaactttt gaatcatata aggcatagta aagtcggtag cttgatgttgc 352

<210> 3812

<211> 458

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-H9

<400> 3812

cggtcggat attccgggtc ggcccacgcg tccggattt gcactaggtg acaaggaaga 60
taagagcaca gtcaaagtgg gagatcaagt gaccgctgaa caaatcgtgg ctgtggaaa 120
ttgtcttat tgcgcaagg gtctcggtt gctatgtgct cctcacgata tatttggcta 180
tcatcggtt gttcacggtg gtatggaca atatatgcgg tttccagaaaa aaagtatcat 240
ctacaacatt cccaagaaaa ttccccttc cgaagcagta tatgtggAAC cttaagttt 300
tgggtttcat ggagcacaga gaggtcgat tgaattgggt gatactgttag ttgtcagtgg 360
ttgtggcctt attggcttaa gaatggttgc cgctgcaaaa ctggctggc ctttcgtct 420
gatcgcttg gattgtatgg attcaagact agatattt 458

<210> 3813

<211> 116

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-A2

<400> 3813

attcacgggt cgacgcacgc gtccgccccac gcgtccggaa atgtggatgc ctccgatgg 60
ggaaagaaaa aagaagcgtg cttggattgt tatacggttgc aggggtggaa aacaat 116

<210> 3814
<211> 374
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-B1

<400> 3814

tccggcactc tattatattg gttatcaagt cggagtatcg ccttggtt gggccatcaa 60
cggagaaatt tatgaattgc acgtgcgcaa ttgggaaatg tcgtgggtg cagccattct 120
tttgggttcc gcattctcag tgagctatac atttaccaga caagtacgag catttacgaa 180
aactggagta tttggattgt atgcaggatt taccctcatt ttctggttt aacatgttatcat 240
tttaatgcct gagacaaatg gaagaacgct agaagatatt cggaaatataat tcgatgaagg 300
tttaatttggaa ttggcaaaat acaactggag ccaaaccaaa acatgggtca ggacgaaatt 360
agggaagcag catg 374

<210> 3815
<211> 413
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-B3

<400> 3815

gtagccgtcc ggaattctcg ggtcgacgca cgcgtccgcc cacgcgtccg cccacgcgtc 60
cggtttggaa taatcttcac tccagtcaac caaaatatacg ttttagatcag catcttgcag 120
ctgtaaaagc cattgcttgg tgtccttggc aatctcattt acttgcattt ggtggaggaa 180
cggcagatag aacgatcaag ttttggaaata ctacaactgg ctcctgttta cagtcattcg 240
atacaaaaag tcaagtatgt gctttgctct ggaatagaca tgataaggag atcgtcagca 300
gtcatgggtt ttcacagaat cagctcatcg tatggaaata tccttcgtatg gtaaaaattt 360
cagagttaac tggacacact tcgagattt tacatttggc tgcaagtccct gat 413

<210> 3816
<211> 324
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-C4

<400> 3816

accacgcgtc cgcaaaaattt gagactctta tagaagaata tacgtttctt ggtgtggaga 60
cagaagcttg gactaaaaaa gaaggaaaat atgctcaagg gaaactcgca ttatccatgg 120
cttcttact ttttgtat acctgatagt aaagatgaaa gtagagagta tagtttctg 180
tggtttttt ccttgtgtct tgtgaaagta tagagagatg gagtataaaa gactttttt 240
gattaaaaaa ataaaaaaaaaa taaaaaatat aaaaaaatca gaaaaaaaaa gaatagaaaa 300
aaaaaaaaatttt caaaaaatgt atac 324

<210> 3817

<211> 376

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-C6

<400> 3817

gtatgaaagg agaaaacgagt gtagcactgt ctagtcgtcc aactcagcga aacagcaata 60
actgtgaaaa tgcagtaaac tagcagtagg acggaaagac cccataattc ttgactagat 120
aggttaggg aggagagaga atcatgaagt agaggaggtg gggtaagaga taaaagacca 180
ctgcattgagg ataaggaatc taactgagta agaaaaataa gcttaagcta gtttggctgg 240
ggaagtaaag cctaagaaag agtaaattag gcaagcaaag gcatgagaga agtataatag 300
cagaacatg cttaagaaa aagaaagaga tttcagaaag ggaagaaaag tcagctata 360
agaacaggtg aaggag 376

<210> 3818

<211> 408

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-D1

<400> 3818

tagccgtcca gaattcacgg gtcgacggac ggtccgcca tttgaatggt gactactcga 60
agttcgtcaa agaaaataca aagtctgtca agaacagaga aagagaatga caattcagat 120

atcaactcgt cgtatacacc gtatcaggaa acctgttcca aaaacgacag taagtgtcct 180
atatcttcaa caaaaattctt ccaactcgat tcaaaaggct ccacggagaa aacaggtaac 240
aaactgacaa gggaaacttgc ggcacttgga gtcatcatac atccaaagag aactcccaag 300
aaaaacttgg attttgaaat gttctttcc atgaacttaa atgttggaaag cgctgataca 360
cgtaaggaaat atgaaaagct aagaatagga acttacacgt catagacg 408

<210> 3819
<211> 398
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-D2

<400> 3819

attcacgggt cgacgcacgc gtccgggtgt a gctgaagga tgccttcgg ttcttgtgg 60
cgggtttcta gttgtgcttggagaaaaa tgccgtgcg ctacgaagca ttgtcattgt 120
ggtgaccaaa attgtcgctgtggtacaaaa tgactggtt tgagtgtga aacctccaa 180
tgttgtgacc gttgtcaagg gaagacctgt ggtgcacgc gttgccatg tgaaggcagct 240
actagctaca agaagtatcg ccgttttca gtataagata cctgagttt taggagttt 300
gaagtgtact catccagaaaa acttacatgt taaaagcgct gatacacgta aggaatata 360
aacgctaaga atatgaactt acacccatc cacgattc 398

<210> 3820
<211> 426
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-E1

<400> 3820

tccagaattc acgggtcgac gacgcgtccg ctgagcgcaa ggattgcttag tttcgatcgca 60
aaaacgacaa acgatagaga agttcagag ggagatcgcc ctgtaacgaa aagtctttg 120
ctgcacagaa gatattataa cagttcgct tccttaggtgt gaaaacctac gttgcgtttc 180
gactggtcta ttcggctgtc taccagttac ttttcctca taggtttcg agtcccataa 240
agacgtcgat ttgtacaaac gactttctc tcgcataact gtgttgctg cttccaga 300

aattactcg aaaaagcggt agcgacactg aatacctgtc cttccctgtgc caagagtcc 360
tgcaatatct gaccatttac tgccaaacttc cttaaaagt ttcaataact tccccgttc 420
ctcctt 426

<210> 3821
<211> 418
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-E3

<400> 3821

tagccgtcta gaattcacgg gtcgacgcac gcgtccgccc acgcgtccga gctttccact 60
ccgtaattat tggctctgaat ctggaaataa gcacaggatc gacattccgt acgttgtttg 120
ctgctctcgat atttcatcaa ttctttgaag gatttgctgt cggtactact gtttctgaag 180
cccattttgg cacttggatc actatagtaa tggtaactttg ctattcttg gaaactccaa 240
tcggtatatc gattggattt ggtaatgcac acacttatca ggaaaactcc tcggcatctt 300
tgttaacgag aggcatttt gatgccatct ccggtgaaat tttaatatac acaggattgg 360
tggagttgtt gacttattgg ttacgcgca actcgaacctt tttaagacgc aaagccat 418

<210> 3822
<211> 442
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-E5

<400> 3822

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ctgaaaattt gtactcgaga gttccctgtg gatatgccta aagacgttta tagtcgagta 120
gccaatattt tgagtattct ttatggagga gacttgaagc gtcaagtata caaaacaact 180
tttacaccag acgactatca acagttggaa caagaaaagg atttattgtt atctctttgt 240
gcattgtata tatgttatgt caaacgttta aaaggacttc cttatgatac ctttgcaacc 300
tttcatttag gaaatggagc tgaattatcg gatatatgtt ggatggcaga taattccccca 360
atggcaatga cgaaaaacct ttgttaatg gcattattta gttatcgatt ggagtatcaa 420

gaagaaaaacg tgattatatt tt

442

<210> 3823
<211> 439
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-F1

<400> 3823

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tgttctgcgc atcaaccacc accaccacca acaacaaaag acctccatgg tattttcct 120
gtatataaac ctcccaactg tacatcctt caagtcgtaa aaaagatacg ttctatcatc 180
ttgaaagaaa tcacttcttc caacgctgga actggtcgca agtggatcaa agttggtcac 240
ggtggtactt tggatccatt tgctaccggt gtattggta ttgcagttgg ttcagcttgc 300
tcgcagcttc aaagtttct tcaaggttct aaagtataca aagcaaccgt gaagttgg 360
gaagaaaacgg ataccatgga tctcaactggc cgagtgatag caacccaacc tgttcctccc 420
aaaataacgc ccgatgaaa 439

<210> 3824
<211> 380
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-F12

<400> 3824

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ttgttcttgg ttggcacact actgatggac gcagaatcga gagagaaaatc tgtttacctt 120
tccaagttgg cagaacaagg ggaaagatata gaaacatg aggaagaaag aggcaaatac 180
gggaaagcag taaaagaaga aagagaaaagg aaaaaactga gtatcaggaa gaaaagaggg 240
agtagatgag gaaagaaaaga tcaaggaagt aagagtaaga gaaggagtaa tgtgaatgaa 300
agcagggaaag tatttgaaga agagagtgtaa aagcgcgtac ctttgcata atgtcccagc 360
gagtgaaaga ggaagcaaaa 380

<210> 3825
<211> 414
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-F2

<400> 3825

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tgtctgagga ccaaacagag tgacaagaag agatggcaag gagaatattg ggtgcttata 120
tgggagatgc cacagtggca actctgttca gtatcaaaat gttgttctat cttaactatca 180
tgggtttctc cataactatc ttggctctca tggaaagaa ctcggatggt atttggatac 240
atagtgtgcc acctgcagaa caatattgtg catacaagtc ttcattggag gtgaaccacc 300
atgaaattgc ttccatttgc aagtatatcg ttgccgtagc tgctattggg ttggttatct 360
cgttttcca gtttgctac ggtctgttgg gtatctttt caagtggcaa caaa 414

<210> 3826
<211> 458
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-G1

<400> 3826

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agcagctgct cctcagagat ggtatgagga acaatgcacc tcatactgct gggttccagt 120
acagacctat gaaacttatac aatgttctca agagaagaag aaggagtaca gctatcctt 180
tcaaacttat gaggcaggttt caactactta ccagtgtggt cagtagcagt cccaaacaagt 240
ttactaccaa tgccaaaagt ataaggaggt tactcagcaa gaatgccagt acgtccaaga 300
gtcgtattgt gtcgagtatg aagaatgtca gcaagttacc caggaagttt ctccttcaga 360
aattgtctac tacggtaat cttcttctag cagtagttac tactactaga acacttgta 420
aatgccccaa attcccaaataaaattgtcc ttttttga 458

<210> 3827
<211> 405
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-G2

<400> 3827

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tatcgaatac cagaactcca actacaacat tgaagtggaa gtgacagaca agaagcaatc 120
ggtatatac tatcggttgc atgacaccgt agtaaaggta actggaaaat gcaactctat 180
caccattgtat agttgcaaca aatgtggagt tgtattcgaa agctcttgc gtacttgac 240
agtggtaat tgctcgatcc ttcagctcca ggtggagaaa caagctccga gtgtgacgat 300
tgataaaaacc gacggcgcaa atatctttat accatcaagt attgttcgg aaacacaggt 360
tgtttaagca aagtcttcat ccgttaatgt aactgtcaca aatga 405

<210> 3828

<211> 409

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-G4

<400> 3828

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ttattattac cttagaaga agcactaacg agatatgacg aggaaaccgg caaatattat 120
gcaacttctg gtcattttct atgggttgc gatcgtacga ggcagccaga ttgtggacat 180
gtggagttt taagaggcat cgacaatcct atcggcatca agtgtggacc atctttggca 240
gtggatgatt tacttcgttt gttggatatt tttagatcctg ataatgagcc tggacgtatt 300
acactgattt ttcgtgttgc agcgggtcga gttgccgaac atcttccaag gtttgtaaaa 360
gcagtgcgca agaaaaatag acaagtcgtg tggagttgtg atccccatgc 409

<210> 3829

<211> 205

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-H12

<400> 3829

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ttacctctcc aagaagggtg tgcacggctg tcgaaagaac gtgctgtgaa gtgagagaac 120
gtacgagaaa gccaaatgag gaaaagaagg caagtagagg gcggcccgag aaaggagagg 180
gcgttaagacg tgatacagag taaaa 205

<210> 3830
<211> 415
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-A1

<400> 3830

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gacatttgtt aacccttgcc gcccctttac gggactttgg aatccttga taaaggatatc 120
atcttgcctt aaaaatatac tagaatggtt tcattttttt gtctactatg ttggatgggg 180
ggctcgctcc aactcttggtt gtgttgcac aatctgtac ttttgcag cttctgcaag 240
tcttccacaa aagtcaaaag caataccctt tctcgatcgt ccgcctgctt tggatggttc 300
catggttggc gatgttggtt tcgatccctt gaatatctcg tcctatttag acttgcgttg 360
gttacgagaa tccgaactca aacactgtcg cattgctatg ttggctgttg tgggt 415

<210> 3831
<211> 370
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-A12

<400> 3831

attcacgggtt ccacccacgc gtccgaaatg tggaaatgga agaaaatgcg gaagaagttt 60
tattcacttt taatagaccc tttgaaatat acgatgacca agtcatttttcaaggaatata 120
ttcgaacac acatgtttcc aacagaagag acgaacatga aaacgtatcg gtttctgaga 180
agcaagcata ttcaagtaat tctagacagt ccagtgagcc aagtcaacat tcttgccttc 240
gaactagttt actgtctaga aacactgttag ataatagttt gtttaatagc catttggttt 300
acctaacaga tgatgtctga ggtcgtaaa gttacggttt ataaggactaaaactgact 360
gatatgtgggt 370

<210> 3832
 <211> 461
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-009-Q1-E1-A3

 <400> 3832

cgggtcgagc cacgcgtcca ccttgcgtc tatcatagac acacgttaac cttggccat 60
 tactactagg aatgaccctt cgtaaaccag tctttaccaa agtagaaaaa ctacaacccg 120
 ggacacaggg gcacaacttg atcggtcaag tgatgaacgt cggtgagggtt atggaaaaag 180
 tgagaccgag tggtgacaaa ctgcaaatcg ccgaagtgct acttgcagat gaaactggag 240
 cggatttt tacagcaagg aacgaacaaa tcaaactttt taaaaaggga gagtggtgtga 300
 ccgttcgaaa cgcaaaagtc aatatggtgc gaggcttat tcgttagta gttgacaaat 360
 ggggagctat taagccgcct ggaccaacgg aaaagttaca aggaccacca aaagttnaaa 420
 accattattt caaacataga atatgaactc gtgtaagaca c 461

<210> 3833
 <211> 395
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-009-Q1-E1-B10

 <400> 3833

ttcaagggtc cacccacgct tccgaaattt agcaatgtac agggaaagtat gacccagtaa 60
 tgaggagtgg agtaaacaga aaaggaagta aaaggaggga atgaaggaa gttatggcaa 120
 aaacacgtgc cagcagcagc ggtaaaacgt gtgttagcaag cgttagagcag aagaacatga 180
 ggaagaaaga ggcaaatacg ggaaagcagt aaaagaagaa agagaaagga aaaaactgag 240
 tatcaggaag aaaagaggga gtagatgagg aaagaaagat caaggaagta agagtaagag 300
 aaggagtaat gtgaatgaaa gcagggaaagt atttgaagaa gagagtgtaa agcgcgtacc 360
 tttgcataa tgcgtccagcg agtggaaagag gaagc 395

<210> 3834

<211> 449
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-B11

<400> 3834

attcacgggt cgacgcacgc gtccgaccac gcgtccggac tacttagtga tcgtatatcg 60
caacttaaag ttgagttgga atatgttcgt tcgcacaggg caagacaacg aaagaaaaaga 120
agacatttg aagttcctgt cgtttctt gttggatata ccaacgctgg aaagagcact 180
ttattgaatg ctttgactca tgctcaagta ctgtacaag acaagttatt tgctacatta 240
gacccaacaa ctcgaagatg tcgactacct ggacttcatg tgcaccccgaa catccttatg 300
acagatactg tcgggatat ccaaaaactt ccgactactc tagttgccgc atttcgtgct 360
accttggaaag aaatagctgc tgcagatatt ctttacatg ttgtcgatat ttcatctcct 420
tccttcgaat ctcagcaaca agctgtcat 449

<210> 3835
<211> 468
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-B12

<400> 3835

agctgcggta gcggtcctac attcacgggt ccacgcacgc gtccgaccac gcgtccgccc 60
acgcgtccgc tcttgaagca ctgaagacgt tgaacgttgc ctctccaaac cacaagacaa 120
gatctaacac tccaacaact tctagtagta accgaaaaac aacacctgac ttttcggaat 180
cttctcgta cctctcctct ccatgctcta caaaagatgg aaaagtacga gtcctagaat 240
ccgaatttga gaagcacgtt gcacccttg taaaacatag tgtctctgta tcagaactat 300
ctgaaaaact tcatttactg catcaggcat cttctaatcg aaactcgaag cgattcagtc 360
agtccgaact ttctaaaatc tttcaagcat cgagtagcaa gcttaagcta tattgcctcg 420
ctcttggta gctaaaatat cttcgataaa aaagggatga tctagtt 468

<210> 3836
<211> 396
<212> DNA

<213> Cyanidium caldarium
<223> Clone ID: LIB190-009-Q1-E1-B2
<400> 3836

cgggtcgagc cacgcgtcca cggaagcgtg ggatgaaatg cagagatctc tagagaaagg 60
caagaaaagaa aagaaaggaa gacacagtaa atgaggcgag aaagcatagg aagtgaaacg 120
gatttaggaac ccgtgtagtc tatgcagtaa aagaaagaat gagtaagaaa aaagggagtc 180
attccaccag gggagtaaag gcgcaagaaaa gaaacccaaa gcaattgacg ggaatcgaa 240
aaaggggtgg atcacgtaaa ttaatccgat ataaaccgag aaccttacct ctccaagaag 300
tggttgcacg gctgtcgaaa gaacgtgctg tgaagtgaga gaacgtacga gaaagccaag 360
tgaggaaaaag aaggcaagta gagggcggcc cgaaaa 396

<210> 3837
<211> 313
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-009-Q1-E1-B4
<400> 3837

gggtcgagcc acgcgtccag ttcaggttga cgatcctgag aagattgctt gaaactttta 60
aaacaaaactt tggttgcgc gcaactctct atcgagttt tgggtatctg cagtcggaac 120
aactacttgc gtgcattgctc tcgtgatcac tatataaaaaa gtagtctctt ctaaaaaaaaaa 180
aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa 240
aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaat ataagaaaaa aaaaatagaa taaaatcacc 300
taagaacaat tca 313

<210> 3838
<211> 409
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-009-Q1-E1-B9
<400> 3838

acgcgtccga aaatggcggt cctaactgta aggatccaaa gtagcgaag taaatagacg 60

tttcaaaggc gtccagtatg aaaggagaaa cgagtgtac actgtctagt cgtccaactc 120
agcgaaacag caataactgt gaaaatgcag taaactagca gtaggacgga aagaccccat 180
aattcttgac tagataggtt tagggaggag agagaatcat gaagtagagg aggtgggta 240
agagatgaaa gaccactgca tgaggataag gaatctaact gagtaaggaa aataagctta 300
agctagttt gctgggaaag taaagcctaa gaaagagtaa attaggcaag caaaggcatg 360
agagaagtat aatagcagaa gcatgcttga agaaaaagaa agagatttc 409

<210> 3839

<211> 433

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-009-Q1-E1-C10

<400> 3839

cacgggtcca cgcacgcgtc cgaccacgacg tccggagtcc ctggtaatcc taagaacacc 60
ccgaaacagg tggactactt gggcgccatt catgtcgac aagcggcagc ccaagctaag 120
gttaaacgtc tcatacttggt aagctcagca atggtaactt accgaagttc attcccttat 180
ttgttcttga actctgcatt tggacgaatt atgcatttggaa aaaggcaagg agaaatttgg 240
gtcatcaaag ttcatgagaa aaatccagaa atggcttata ctattgttcg cccaggacac 300
ctgataaatg agcctgccaa agggcccaag tcagtaatag ttgatcaagg tgatgcatt 360
agttggaggg ttactanagc ggacgtacgaa aaagtatgct gtgcttggaaa 420
aatacgtatgaa atg 433

<210> 3840

<211> 405

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-C2

<400> 3840

gggtcgagcc acgcgtccga ccacacgtcc gcccacgcgt ccggcagcat gatgaagagc 60
gctatgaagt tctttgtatt tagcattatt ttggcaaattt ttgttcttac tattcaagca 120
gcaacggttt tggagacttt ggagtcactg aaatatacag agtatcttga catggtaaag 180

gctgcaggcc tggactcgaa gttcaacgac tctgctgtta catggactgt ttttcagca 240
aacaatactg gagtcaatgc caccttggca ccaaagcact tggttatttc taatatcaca 300
tctaattcgca cggagagcaa agacattgtg gaatatactt tgtacaacca tactctttg 360
tcagatgata ttaagacagg aacaactatc cttaccgccc taaac 405

<210> 3841

<211> 455

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-C3

<400> 3841

gggtcgagcc acgcgtccag gaagaagcag agagggacta tgagcgagaa ggtggatagt 60
cgagagggaa aaagcccaga agccaagata aggtatcaaa gtaaagaaaag aaggaaaagg 120
agaagaagag aggttaggct tagaaggcagc aaaccagaga ggaaagcggtt aaagcatgaa 180
agaaaagaaa tccgaaaaag aagagaaaaa ggtaaagaaaag aggaccgaat cagggtaaga 240
ggtagaggag caagaagaga agagagaatg ctgggtggag tagcgaaaca agagaaggaa 300
agtaaaaggt aagaaagagg aaaggttac gagagaagga agtagaaaga agagagtgt 360
aggcggcgctc ataatagaaa tccgaaagga gttagaagaaa agagagagga gaaaggaaaag 420
gaggagaaaa ccgtactgaa gaccgacaca ggtac 455

<210> 3842

<211> 334

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-C4

<400> 3842

cgggtcgagc cacgcgtcca cccaagcgctc cgggaaaacg cgaggtcatt ggatatactt 60
tggaaagcagc ttacagaaaa acttgtattt tggaaaacca gttgagggag tggaaaaaga 120
aactcgatag tctagcagac aattattcgt tgggtacgag agcctatgtat gcgagaatgt 180
ggtcatttggc cctcatcgca actattatga gtgtctgttt tgcagttttt ggaatgtttt 240
cacaattctt tggttattat gtccaaattgc ccatttacaa tatggaaat gccagtcgt 300

attactttta tggcgtgatg ggaggtattt ccgt

334

<210> 3843
<211> 439
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-009-Q1-E1-C6

<400> 3843

aaggatccaa agtagcgaa gtaaatagac gtttcaaagg cgtccagtat gaaaggagaa 60
acgagtgttag cactgtctag tcgtccaact cagcgaaaca gcaataactg tgaaaatgca 120
gtaaaactagc agtaggacgg aaagacccc taattcttga cttagataggt ttagggagga 180
gagagaatca tgaagtagag gaggtgggt aagagatgaa agaccactgc atgaggataa 240
ggaatctaac ttagtaagga aaataagctt aagctagttt ggctgggaa gtaaagccta 300
agaaagagta aattaggcaa gcaaaggcat gagagaagta taatagcaga agcatgcttg 360
aagaaaaaga aagagatttc agaaaggaga agaaaattca gctatagaga acaggtgaag 420
gagaactcan aaagaggag 439

<210> 3844
<211> 397
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-C8

<400> 3844

gacccacgag tccagattgc gctgcaaagg agtgggctgc ggtgaacctt tcaactagtc 60
ttcttgtaat ttgctgccat gggctttcc atctccaagt tattatcgcg tttatggaa 120
aaaaaaagaaa tgagaatcct tatggtaggg cttgatgccg cggaaaaaac taccatatta 180
tacaaactca agctgggtga aatcgacg acgatcccc ctattggatt caacgtggaa 240
accgtagaat acaaaaatat cagtttacg gtgtggacg tcgggtgtca agacaagata 300
cgacctttgt ggcgccacta cttccaaaac acccaaggtt tcatcttcgt agtggacagt 360
aacgacagag agcgcccc cgaagcacgg gaggagc 397

<210> 3845
<211> 435
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-C9

<400> 3845

attcacgggt cgacgcacgc gtccgaccac gagtccgctt ggttcgaagc tacttatgaa 60
gagttggaaa gtatTTATG gagTGTGATG tgTTcacaAG atGAATTATC tgCTCAGTTG 120
gcCTCTATA tggAAAAGTT gacAGAGTTG gAAAAGACAG aACAAAGTAT agTTGTGGGA 180
gaaggTCTGG AAAAATTGAC agatGCCAGA cactTGGTGA atAAAACAAA gACCAAACTG 240
gataGTTG ttACTAGATT agAAAGACTG ctTCTTCTGA cgAGTGTCC gTCAGTTCC 300
aAGAGAGAAAT agTTGTATCC atAGTTTGT gCAAGTGGGA TGTtTACTGC tCTATAGTGC 360
agataAAATA gAAAAGCTAG AGCCGAAAAAA AAAAAAAAAG AAAAAAAAAG 420
gaaAGGAAGG gagAG 435

<210> 3846
<211> 379
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-D1

<400> 3846

actgtctagt cgtCAAACtC agcgAAACAG caataACTGT gAAAATGCAg tAAACTAGCA 60
gtAGGACGGA aAGACCCAT aATTCTTGAC tagATAGGTT tagGGAGGAG agAGAAATCAT 120
gaAGTAGAGG agTTGGGGTA agAGATGAAA gACCACTGCA tgAGGATAAG gaATCTAAct 180
gagtaAGGAA aATAAGCTTA agCTAGTTG gCTGGGGAAg tAAAGCCTAA gAAAGAGTAA 240
atAGGCAAG caAAGGCAtG agAGAAgTAT aATAGCAGAA gCATGCTGA agAAAAAGAA 300
agAGATTCA gAAAGGGAAG AAAAGTCAGC tATAGAGAAC agGTGAAGGA gAACTCAAAA 360
agAGGAGAGC ACCGAACGA 379

<210> 3847
<211> 444
<212> DNA

<213> Cyanidium caldarium
<223> Clone ID: LIB190-009-Q1-E1-D10
<400> 3847

cggtcgtaga ttcacgggtc cacgcacgca tccgaccacg cgtccgccc cgcgtccgcg 60
gacgcgtgg gcaggtttgt caacagtatt gccaactatc gtacctcagg tcggtagtt 120
atccatgtca aactcagata tattatcctt gtcaagaata taagttgatg caaatcgagc 180
aatgttcca gatccctcag ctgaagtgtg tacaatacac gcaatctgt gtattcaac 240
aaattcaaca acaacagcag caacaacagc agcaacaaca gcaacaacag cagcaacagc 300
aacaggaaga gcagcaagtt caacaggaag aacaacaagt tcaacagcaa gagcaacaag 360
ttcagcaatt gcagtattat ggatagttat ttttatatt tgtgatttc ttgtggacgt 420
gccaaagtag cacaaaagtt gttt 444

<210> 3848
<211> 442
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-009-Q1-E1-D12
<400> 3848

ttcacgggtc cacgcacgca tccgaccaat ttgtacaatt cttataaacg tggattccgt 60
accaatggag tatctttgt atgtatttg tcgattgcat tatgtcgtct ctgttattatg 120
cctttgtgg gttggcatg gatacgtta ttattgcact ttgaaatatt atcggatcga 180
acggacaata ttcaattgtt ggtaatgatg atagaaacgg cagtaccatc ggcaaaacaat 240
gtggtgatta tgggtgagat ggttggaaacg agtgaagagg ccatttcgtt ggcgttgg 300
tggcaattta tattggctcc cttgttttg acggcaataa tggcgaaaa cttgtggct 360
ttgaaatagt ttaccaattc acacgttggaa tatattggtc atctatgtat gtttgg 420
aaaagaataa atccttgggt at 442

<210> 3849
<211> 357
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-D2

<400> 3849

ggtcgagcca cgcgccaga aaattttag tgaccttgc gaccatcgaa aaatatttcc 60
tcgtcaactc caaactattg attgcgattt agtagagtta tagtgtgcca acttgtggac 120
aaggcattt gtttgaagct tctttggca taacaaaaag cttcgtccc cggatgcctt 180
tctgaaagga agaagaaggc tgaaacatag gtaggtgttc actgcagctc aaagtaggaa 240
aagtgcataat agatctttat tcattttttt ggactacta ctacacatga aatcttggag 300
accccacat attcaactag agtctcactg gtatataaa attctcggt tggtgcc 357

<210> 3850

<211> 456

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-D4

<400> 3850

acgcgtccag agaaaaggc caaacaagag aagtcagcag tggggaaaat tggcaatgt 60
acagggaaagt atgacccagt aatgaggagt ggagtaaaca gaaaaggaag taaaaggagg 120
aatgaaggg aagttatggc aaaaacacgt gccagcagca gcggtaaaac gtgtgttagca 180
agcgttagac agaagaactg ggtgtaaagg tcgagtagta gagtaagtgt aaaaggaaaa 240
ggaaaggaga gaaagaggaa agggatgaaa tgcagagatc tctagagaaa ggcaagaaaag 300
aaaagaaagg aagacacagt aaatgaggcg agaaagcata ggaagtgaaa cggatttagga 360
acccgtgttag tctatgcagt aaaagaaaga atgggttaga aaaaaagggg atccatcccc 420
ccagggggat taaaggcgca agaaagaaac ccaaag 456

<210> 3851

<211> 307

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-D8

<400> 3851

aaatgatcct agagtaaaac aacgtgaaag tgaccaaatt gttaaagcaa tgttggaaaa 60

gaatattccg gtcgaatacg tcttgttatcc agacgaaggt catggtttg cgagaccacc 120
gaaccgccta gacttttgg gaagagcaga agtattttta tccaaatatac tgggagggcg 180
ttgtgaaccc tatgaaaaag ttccctgaaag tactgcgcga ttgcctattc aagaaggct 240
cctttcgtag ctttatgaa aataaagtct tttggtagca cttaaaaaaaaaaaaaaaa 300
aaacaaaaa 307

<210> 3852
<211> 408
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-E1

<400> 3852

gggtcgagcc acgcgtccga ggatgttcga gctgctggct ttttgcataa aaaggaattt 60
gagtattttg aaaaggcatt gaagaaccca aagagacctt attagctat cttgggagga 120
gccaaagtat ccgataaaat acaactcatc cagaatttat tacaaaaagt ggatgaaatg 180
attatcgag gtggcatgtt ttatactttt cttcgagttat tatattccat gccgatttgg 240
gactccattt atgatgagcc tggatcacat ttggtagaaa atattatgaa agaagccaaa 300
gaaagaaaatg taaagataca tttccagta gattttgtatg tagccgatcg tatggctccc 360
gatgcacata cagagatacg tactagagaa caaggtattc ctgagcat 408

<210> 3853
<211> 436
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-E10

<400> 3853

gtcgtaaatt cacgggtcca cgcacgcgtc cgaccacgca tccgatgtgg cttgcatttg 60
tacatgtggg ttgtatacac caaaaacggt ataaaagatc cccaaatgttttcc 120
aaggaataag acttgtatgt gtatccaaaa aagccaaaga aaaaaacgcac tggggtttcc 180
gaccacccga tattcctacg atgaaagaga gatatgcagc ggaacttgcc tatgtagaag 240
aaaagtttgg accaaagaga tatgaaactc ccgaaaaagc cgacgcatttgg aaaaaaagaa 300

tacttgttaa tcaagagtgg gcgaaacaag aacgcagtca aggcttggaa caatatcaag 360
atattaaagt tacgatactc ggagcaactt tggaattgg tgcgttctt attccttgg 420
tatggtggtt gggttc 436

<210> 3854
<211> 373
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-009-Q1-E1-E2
<400> 3854
ggtccagaat taccgggtcg agccacgcgt ccgaggaata tgaggaggag tggctgtctc 60
tttgcctctc caaaggact ttattggaga agattcttct ctacagaata tgattataca 120
ggaggaactg gaagagaatc cacaggattg tcggcttcg aacaagaagc cagagagaaa 180
gtaatacggtt tgtatcgata tgcgctaagt agtgtcaaag atattcgcaa acactatcg 240
ttaaatgaaa gcaaagaaga tatagctgct tgtattcgag atttatttga aaggcataaaa 300
catgttcaag atcgaaagct tattgatatg ttgggtttca agggacgaca agacatagac 360
gaagttcgcg ccc 373

<210> 3855
<211> 306
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-009-Q1-E1-E3
<400> 3855
ccgggtcgag ccacgcgtcc aggtgggtgg tgacgacgac aggttcgac gtcgacgatg 60
cctaaacaaa tcaaagatat caaggaattt ctgctttgg tccgcagaaa ggatgcgaga 120
gccatcacaa taaagaaaaaa caagaccaac acgaaattca aagtccgtt cagcagat 180
ttgtatactt tgtagtgaa agaaaaggac aaggcgaaca agttggaaaca aagtcttcca 240
ccaggtttga ctttggaaaaaa gattgattag aaataaaactc tatkgtt gttcttgc 300
tggatc 306

<210> 3856

<211> 261
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-E4

<400> 3856

gcgtccatgt aaattcaaca tcatcaaatg ccaaaggagaa gaaagaaaaga ttcttcaaag 60
aaagaagcca caagtaaacc tgtagcagca gatgctacaa agacgacaga aaagtctgg 120
ccggaagcca agttgaaggg aactggtgca aagaaacaat aaaaagttga ctatgcattgt 180
tcctgttatg ttttgtgagt tctgttgat agttccagc tattctttg gtatgtata 240
aagagaaaaat ttttatatt t 261

<210> 3857
<211> 393
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-E7

<400> 3857

gggtcgaccc acgcatccac ccacgcgtcc gcccacgcgt ccgcccacgc gtccggaaag 60
ctctcttatg tggtaacag gaagggacag aagaaagtcc agtcaaagta aaactagtaa 120
aacctcctct ttatgttggtaaacaaccagct gtcttgataa gaaacaaggc atcgaatct 180
tacaacgagc agttagaagcc ataaagacca agatttaga gaagaatggc aaatttacca 240
tcaaagaaga gccacgagct atcagcgata gagatgacag actgttgtct cgattaatgg 300
atgaattaga agcagagaat cgtgaagtaa gtgggtgatga agatgaaagt gacgaggaac 360
aagacgaaga aatgatggaa gaggaagaag aat 393

<210> 3858
<211> 372
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-E9

<400> 3858

cgcgtccgag aaatggatgg aatcgactcg aaaatggcct ataaatagcg tgatcatttc 60

cccttttgt ttgttatcg tttgtcaaag tttgggttgc ttcttggttag cagttgtaca 120
ttcaacatca tcaaattgcca aaggaggaa agaaagattc ttcaaagaaa gaagccacaa 180
gtaaacctgc agcagcagat gctacaaaga cgacagaaaa gtctggtccg gaagccaagt 240
tgaagggaac tggtgcaa at aaacaataaa aagttgacta tgcatgtgca gtcctgttat 300
gttttgtag ttctgttga tagttccag ctattcttt ggttagtgaat aaagagaaaa 360
tttttatat tt 372

<210> 3859

<211> 407

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-F1

<400> 3859

cgggtcgagc cacgcgtccg aggcaaggcggcgtttttt ttgttttatta gcccataatgcg 60
ttgtttcaac aatacaagca caaggctcta gtactcttgc tccaaacagga gtttagttcta 120
ttcctactag tgctgttaca ggcgctacgg gaataccaac tagttccctt agttcggttt 180
ccacggaaat accaaccagt gtaccaacaa catcatcttc gattactatc cttactgtct 240
tgcaagacaa ccactttgac gatacagtac aagctataaa tgcggcagga cttgactctt 300
tgtttaacaa tccttccgct actcttactt tctttgcagc aaatgactct gtatggtcta 360
cttctacagc ttctcaagct ctgagtgctc ttccaaaccag tgcacca 407

<210> 3860

<211> 369

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-F2

<400> 3860

gcgtccaccc aagcgtccgc ccacgcgtcc gcccacgcgt ccgagaaaaga ggcaaatacg 60
ggaaaggcagt aaaagaagaa agagaaagga aaaaactgag tatcaggaag aaaagaggga 120
gtagatgagg aaagaaaagat caaggaagta agagtaagag aaggagtaat gtgaatgaaa 180
gcagggaaagt atttgaagaa gagagtgtaa agcgcgtacc ttttgcataa tgtcccg 240

agtgaaagag gaagcaaaaa gaaagaaaaa gaagtagcca ggtaagaccc gaagctagtt 300
gatcttatgc tgtccaagcg aagtaaggct gaaccagtat ctgtggaaaa agatttgaa 360
gagatggca 369

<210> 3861
<211> 404
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-F3

<400> 3861

gtccagaatt accgggtcga gccacgcgtc cagaaatatt cggcagcaga ttgtctattg 60
gatccttctc gagttggact atcttccaag tcgcttagtag atgaaattat cgatgttatac 120
gaaggttgtt attctagtct gcatagagaa ctgtattctt ccataatgttt ttccgggtgg 180
acgtcgaacc taacaggctt tttgaaatat ttgacggtag cacttggtag aagaatgcata 240
aaagttaagt tgcttggttc gaatgtagaa gcagaacgac gatttgctgc atggactgg 300
ggttctatgt tagctacttt tggagagttt cagaagatgt ggctttcaaa agctgaatata 360
gaagagaacg ggaaaacttt tattcataag aaatgtgcct agat 404

<210> 3862
<211> 394
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-F4

<400> 3862

ggtcgagcca cgcgtccatt gaaaataaat atcaacatata cgttcttga ggttcgtaat 60
aaacgacttt agtaagttt gtcgctcacg acaaattctt tcaaagtcgt tctttgaca 120
acaaactaac ttgaaactgc gcttgtaat aagcttccaa ggtaccttg gtttccgcaa 180
cggcggaaac aataaaaaagg ctttcttctt caccgccatt ataacgccac cttttggaga 240
atttctgaaa cattccaacc cgcagaacaa ccttcagtgt cgaatgccag aggatacatt 300
agaagacttc tacttcagtt atcatcattt ttgcagaatc aatttgcataa aacttgcata 360
aactgcaggc aaagcaacag taaatggtca tgac 394

<210> 3863
<211> 442
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-F9

<400> 3863

ttcacgggtc caccacgctc tccgaatttg agctcttgg gaagcatgac gtctatttgg 60
gaggcatcca aacaactcct ttatcattac aaaaacacag ttccttacca cttaaaggtt 120
atcgacgctt ttctcttgc tgcgtttct actgctgcc tccagttgt ttacgtcttg 180
ttcgttggaa ccttcctt caacgcttcc ttggcgggtt tcttctcgtg tgctggagtt 240
tttgttga cagtggcctt gcgcatgcaa gtgaatccgc ggaatcagaa cgagccaat 300
cgatggaaaa aagtgaaccc ctaccgtgct tatgtagaat ggctgttttg taacttgatt 360
ttgcatatttgc ctgtaatcaa ctttatttggaa tgagagaata gtacgcgacg atataaagtt 420
atgacgatgg acgctacact gt 442

<210> 3864
<211> 350
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-G1

<400> 3864

gggtcgagcc acgcgtccga gaagagcgtg cgtggaggat ggatccgggtt atgcactaat 60
ttggggaaaaa cttgttttat cagcaacaga tactgccaac gcgcgttcgg tcatacgtaat 120
gaaagacgt gtggacaaga tattggagct ggatagtcatt aagaccccttag ctatgggtgg 180
ggagccaggt gactttgtgc agttcacgga gtatatacaa aagaatcttc acctttacga 240
attccaaacg ggattgcaac taagtactca cgccagttgct aacttcatcc gtgggggaat 300
tggctagatt gatacgggaa agccccgtat taacccaaact acttttgggg 350

<210> 3865
<211> 428
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-G10
<400> 3865

ggtcgaccgg acgcgtccga ggacttgtgc gtacggtgtg tgtgtgtgtg tgtgtgtgtg 60
taacaactat cagcaccaca aaaagatggt tcgtatgagt gtattagccg atgcttgaa 120
atccatcgcc aatgcagaaa gaagaggaaa gcgtcaagtt ctcatccgcc cgagctccaa 180
agtcatcata cgcttcttgc aggttatgca aaaacacgga tatattggag agtttgaata 240
tgtggacgat catcgctcgg gcaaactcgt cgttcacttg ataggcagat tgaacaagtg 300
cggtgtgata tcaccacgat atgacatgaa agtgcacgaa gtagagcaat ggatcaataa 360
cttgcttcca agtcgacaat tcggggtcgt agtttgaca acatcgatg gtattatgga 420
ccacgaag 428

<210> 3866
<211> 406
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-G12
<400> 3866

gtcgaccgac gcgtccgaag gtaacaaagt aaagaaagaa ggaaaaggag aagaagagag 60
ggtaggctta gaagcagcaa accagagagg aaagcgtaa agcatgaaag aaaagaaatc 120
cgaaaaagaa gagaaaaagg taagaaagag gaccgaatca gggtaagagg tagaggagca 180
agaagagaag agagaatgct gggtgagta gcgaaacaag agaaggaaag taaaaggtaa 240
gaaagaggaa aggtttacga gagaaggaag tagaaagaag agagttaag gcggcgtcat 300
aatagaaaatc cgaaaggagt agaagaaaaag agagagaaga aagaaaaagaa gagaaaaagcc 360
gtactgaaga ccgacacagg tactcgagga gaaaggagac ccaaat 406

<210> 3867
<211> 390
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-G2
<400> 3867

cgggtcgagc cacgcgtcca cggaagcgtg gggagcatgg tacgagaagc tttattgcag 60
tcggaaggcg ctcggttat tcaacaaatt tatcggtgc ttcaacaaac caaacgagtg 120
caccgagttc ctgaagagtt gattctggat acggtaagat agatgatcct attttctgtat 180
ggatatgtat acatatatac tgcttttcg tggtttgtt gtatagatat tagaaaaaca 240
ttttcacct gcagaatctc gcagacagtt ggaagtagcg ataggttagga aagtgagttat 300
gatatatttg taatatactc agaataggag atagaatggg gaagatatgc ggaactctt 360
ggctatgtat caccgagtgg cgaactgttt 390

<210> 3868
<211> 335
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-G3

<400> 3868

gggtcgagcc acgcgtccga ccacgcgtcc gggcgaaaac accccgacat aagtccgtgg 60
acaaacctta aggcttgctt tactggttt ggaacagctt tggcactttt taccggttat 120
gttgttttag aacaggctta ttactatTTT tacaaggcta cacagacgca agtccccgag 180
acgaaatcgg aagaacttgg ctccctgagtt tcgtgttctt gtaaagttgg aacctcacgt 240
ctatccctac atggtgtcaa agacaggcca ctgataaggc taaggTTTG tttcgttcc 300
ttggggccaaa gtaataaaga gtgttatgtt ttctc 335

<210> 3869
<211> 438
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-009-Q1-E1-G9

<400> 3869

ttcacgggtc gaccgacgctg tccgcaacta tccaaaggac gagatgagtt gggacaacga 60
tggacagcgc ctttggacag gcaaagactt tatagaatat gtcaagttga gatggggaaa 120
tcctttatTTT cgtagaaatt gctgtggta tagtacaggc agtatagtat cttgtgacac 180
tggaaaggTTT ttacagagtt gggttcgtg tgagtgttgg agatcaatag tacgattatt 240

taggtcgttg cactgcttga agggttagaa ttaggaatgg tgaagagtat atcccaacca 300
tctagtaatc aagcaacagt agaagctcta gttcctcgaa aaaaactgta ttttctcaag 360
gatccagtaa caggaaagta ttggaccgaa cgagattcca nacgagtaaa tccaatgttt 420
tatcctcagc aagataca 438

<210> 3870
<211> 349
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-H1

<400> 3870

gggtcgagcc acgcgtccag ggaatcattc caccagggga gtaaaggcgc aagaaaagaaaa 60
cccaaagcaa ttgacggaa tcggaaaaag gggtgatca cgtaaattaa tccgataaac 120
cgagaacctt acctctccaa gaaggtttg cacggctgtc gaaagaacgt gctgtgaagt 180
gagagaacgt acgagaaagc caagtggaa aaagaaggca agtagaggc ggcccgtaga 240
gcagaagaac tgggtgtaaa ggtcgatgt tagatgtt gtaaaaggaa aaggaaagga 300
gagaaagagg aaagggatga aatgcagaga tctctagaga aaggcaaaa 349

<210> 3871
<211> 396
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-H2

<400> 3871

gggtcgagcc acgcgtccgc aaggaagaac agatggaaac cacaatagaa ttgggtgtaa 60
aaagtaacct ttctaaaccaa atgagacttt ttgaatggaa agctgaacaa gttgttgtgg 120
cagtagaatt accacaaagg ccttgcaag tcaaagtcaa gtcatgcaac ggaggaaagt 180
ggaaatggtc caaagaacaa agttggttt tttggagtt gaagaaagct tcttcagata 240
gagaatataa attgaatgca gatattgtat ttgatgctcc tttggacaca agaaaaacac 300
tgtatagtgt gatagatgtc catttgtta ttcctgatga aaccttgaca ggattnatgt 360
tattaagttt gttgggtgaag gagccaaaat tggact 396

<210> 3872
<211> 399
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-H3

<400> 3872

gggtcgagcc acgcgtccga ttcaagtgtt gcaactagaa aacaccctag caagttgttc 60
aagttggcac tctcgtccat ggccggcaaac ggaaagattc gggtaaaaaa ccctgtcgac 120
gaactggatg gggatgaaat gacccgcac atatggcat tcattaagaa caagctcatt 180
ctccccatatac tagacatcga cttgaaatat tatgatctag ggttacccaa cagagacaaa 240
accaacgatc aagtgacgat agacgctgca cacgctatcc agcggtacaa cgtcggtgac 300
aatttgtcga ccataacgcc tgatgagcag cgagtaaaag agttaatct gaaaaagatg 360
tacaaatctc cgaacgcaac gattcgtgga atcttgaac 399

<210> 3873
<211> 438
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-H9

<400> 3873

attcacgggt cgacgacgacg tccgaccacg agtccgggac agcaaccaca aggagcagca 60
gcagatgatg atgcaatgta tcccgattat catttatgta tatacattgc agagtttcaa 120
aaaggctatg aacgagtcga agcactgggt ttgctgtaca atgaccacat atttccgat 180
aaagttata gttatcaaga tgcgttggtg cacaatcagt ttcgattgcg agatattctt 240
gatttggaaag cacatggtaa gtgggtggataatggagt agaagagatt gagtgtgtgt 300
aaaagctcgt ggacaacgcc gcgtgttgta tcgattgcaa ttggaaacgc ggagtttata 360
tcatccgttt tttatgcggc cattggtgaa tcccatgggc caagtaagaa tttattgttt 420
tcaataatcc aataaaaaa 438

<210> 3874
<211> 376

<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-A2

<400> 3874

cgggtcgagc cacgcgtcca cggaagcgtg ggcggacgctt ggccaaacc agggatctcg 60
ggccgtac ctgttcgt gacgaattcc cctatcaaga gtcgtaaact cagtccagg 120
aaatatggaa ggctcagaat caaattcaac gtcaaattcg aatatccgca cacgttaaga 180
ttaccatgac atccatttag catcacattt cttttacaaa tgcataaac tctagctcat 240
ttacctgctt atttcgaaaa cctattacac ttaattcgag ataggtacaa actgacgttc 300
atcatatgtt accattctaa cttgaaatac acagctttaa cggcaggtat acaagcagta 360
gcaaaataca attcct 376

<210> 3875
<211> 333
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-A5

<400> 3875

aattacgata tccaatgaag gaacagcaaa gagaaagtgc ctacgagtat acaaaatatc 60
caataaaagt tccaagagga gctccttta gaccaacgtt tcagtcctt gttaccttt 120
tgaacattct ctaaactata taaggcatca tgatatacgat attcgatttc tttagcctgt 180
tctgataact ttgtggataa aacctgattc agtgcagcta tttcaacagc ctgtttttct 240
acagtcttga ctgctcaag tgtctccatg agttccacta acaaggcttc attctctcct 300
tccaataaaaa gctgcttccg gtcttggctt tcc 333

<210> 3876
<211> 368
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-C1

<400> 3876

cgggtcgagc cacgcgtccg cgagtcggtt ggtaagttat gtagccaaga ctggtttga 60

aggcaccgtg gaagtagagg cgatgaacgc ttacaagtg ggacaaattt agaaaaccta 120
tgaaggccta actagttac agcgtgaatt ggatagtgct cttgctagtc agtattattt 180
gagaactcgt ttgatgcggc atgaacaaac ggtgatggct acgaatagag cagtttggt 240
atttctgttg ctcaaaacgc tgtttgtgc ttgtctagtt gctgtcaaatt tgtattttgt 300
gaagcgttt tttgacgatc cgaaacgcgt acgcatgaga gtataataaa gccattgtt 360
ttttggtt 368

<210> 3877
<211> 304
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-C2

<400> 3877

acggacgcgt gggaaatttc aatggaggag ttgcgagctc agttaccaag atatcaaaga 60
cagatgatat cgtcgctgta gtaattcgta tctatgctt aagtttcat ctttttgcta 120
acacgttggt ttagttgttag aaagcatttg ataaatttcc cgcgaggaat cctacttggg 180
acgtgtcctc caatgctgca gagagctatt cggtatgtct gtttattgct tgttttcata 240
agagagagag agttggacat cgaataaaaga aaaaaccaca caaagtggaa caacataaac 300
aaaa 304

<210> 3878
<211> 398
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-C3

<400> 3878

acgcgtccga ttgaacttgg agctttaca acctgctcta ctcaatatcg atccatcatt 60
caacactaca aagctgctgt atgacaacga cgatggtttc cggcaacaac tgcagccaac 120
cacagcaagt tgccactttt tgtctcctcg aaagagaaaa ctacttcatt catgtgcaaa 180
aggaaacatt gatacagtta gggatctgat tcaagacgaa aaagtctcac ccaactttta 240
caactatgac aagagaacgc cactacattt agcagcagct gaaggacact tggaaattgc 300

acaaatcttg gtagaagctg gagcgtcttt aactacttat gatacatggg gatgcacacc 360
tctcttcgac gctgttcatg ggaaacatca aagactga 398

<210> 3879
<211> 372
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-C5

<400> 3879

ttcccgccc gacccacgct tcagggaaaga ggataggggg gtacatagat gaggagt'gta 60
ggaaggagat agaagaggaa tggagaagat gggagaggat aaagcagagt agagaagagg 120
agggagtaga agaggagttg aagttatgga aggaagagaa taaggagagg atagaaagaa 180
tgaataaaag aatggaagag tacttaagga ggaggataca ggagagaatg aggaagtact 240
tggagcagat agaaaaggtt gataggagta tagagtttta ggaagagaga gtaggagagt 300
ggaagatgag tgaggaggag atagaagaag gcatagaagg aaaattggc aatgtacagg 360
gaagtatgac cc 372

<210> 3880
<211> 414
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-C8

<400> 3880

ggtaactatgc aggaattccc gggccgaccc acgcgtcagc ggacgcgtgg gcggacgcgt 60
ggggctttac ttatattgcg ttgttgctt tggccgtac ggtggcagtg ttccaggtgc 120
ctttaagcaa tgcttgattc tagtgcagtt ttccgataac ggagtatgaa gcttagtatg 180
catatgttc cagacactga gtatctgaa gtcttctgct taagttgaaa ccaagttaag 240
aacacgtctt aagtttcctt attcttgatt gttcttatta gccctacaag ctgttttagaa 300
atataagagaa gcttagctt agggaaaagc attctgatgc gacggttctg aagccttggc 360
gaagggaaaga catcgcccttc cccttacaag acactaccta aatgcaacag aact 414

<210> 3881
<211> 428
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-D1

<400> 3881

ggtcaagaat taccgggtcg agccacgcgt ccgcaaactt cagagtatacg agaactcggt 60
gaaagtggta ttttagtcag tcctcttggg tttggggcct ccccattagg tggagtgttt 120
ggtcctgtga gtgaagaaga aggtattaga gctgtacata aggcgtggaa agagggcatc 180
aactttttg actgttcgcc ctattacggc tttacaaaaag cagagaaaagt attgggtctg 240
ggtttgaagg accttcccag agagtccata gtggttgcta cgaaagttagg aagatatgga 300
ccttcagaaat ttgactttc agcaagcaga atcgagcgca gtgtgaaaga gagcatggaa 360
cggttgaacg ttagctattt agacgtcggt cagtgccacg acattgagtt tggcgatctg 420
aatcaaat 428

<210> 3882
<211> 410
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-D12

<400> 3882

aagatgaggt atagagaatg gcggtcctaa ctgttaaggat ccaaaggtag cgaagtaaat 60
agacgttga aaggcgtcca gatatgaaagg agaaaacgagt gtagcactgt ctagtcgtcc 120
aactcagcga aacagcaata actgtaaaaa tgcatgaaac tagcagtagg acggaaagac 180
cccataattc ttgactagat aggttaggg aggagagaga atcatgaagt agaggaggtg 240
ggtaagaga tgaaagacca ctgcattgagg ataaggaatc taactgagta agaaaaataa 300
gcttaagcta gttggctgg ggaagtaaag cctaagaaag agtaaattag gcaagcaaag 360
gcatgagaga agtataatag cagaagcatg cttgaagaaa aagaaaagaga 410

<210> 3883
<211> 409
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-D2

<400> 3883

gggcccggaccc acgcgtccag gttgtttgac cattggacaa tccattatct ttgtgcacac 60
acgcgcagaat gccaacgaat tgaccaagag acttcgagag gaaggccata ctgtatctt 120
gttacacgga ggagatatgt cacctaaga acgggatcgc gtgattgacg agtttcgacg 180
tggaaactacg aaagtattgg taacgaccaa tgtattggca cggggagtag atgtattaca 240
agttaccgta gttgtcaatt atgatttgcc actagatgtg aacaatcaac ctgatccaga 300
gacttactta catcgagtag gaagaactgg aagatttggt agaaagggtc ttgctatcaa 360
ttttgtgtat gatcgataca gtttgaagca gttgcaggac attgaaaaaa 409

<210> 3884

<211> 281

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-D4

<400> 3884

cacgcgtcca cccaaaggcgtc cggtgggtat tgcgactcat ggccatgctg ttggtaatgt 60
gtgtctatag aagaagtcta ttgtggaaa ttcgaggaat gctttttaa aaaaaaaaaa 120
aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa 180
aaaaaaaaaaa aaaaaaaaaaa aggggggccc cccaaaagga tcaaaaactta cgtacacgtg 240
aaagcaaagt caaaaccctt caaaagtgtc accaaaatta a 281

<210> 3885

<211> 402

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-D5

<400> 3885

ttccccgggcc gacccacgct tcagcgtaca ttgtccagtt tgcttttct gttgtagtca 60
ttgctatgtt ctcccaagtt accttttatac tataccgtga ctttaagtgt gctttcgatg 120
ggcattggga ttacgccacg catagcgaag tgtctggtcc tgtgggttat tgccgttact 180

tcattgctt ggggagcatt tccatcgta ctttagctat tggtgccgt aacttttg 240
gaacgctgta ttttgaagtt cctatggact atatcttta tggtgaatgg gggatcaacg 300
cttttctgtt tctgtggtgg attatcggtg cttctctcat tactgctaaa agaccttcgg 360
atgagttgat gcaaatgtt aacaacttgc gtgaagttgt tg 402

<210> 3886
<211> 389
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-D6
<400> 3886

ggtactagtc tagaattccc gggccgaccc acgcgtcagg gacgttattt tggtgttggt 60
aggaaataaa accgaccaaa ccgaacgtag acaagtaagt acggaagaag gagaagccaa 120
ggcaaaggaa tatggaatta tgtttatgga aacgagtgc aaagctggtt tcaacgtcaa 180
agcattgttt cgaaagattt cttctgtatt gccaggaatg gaaaacgtac cagagcctac 240
aaatatgcaa atggtgata tcaaactcaa ctccaacaca gaaacgacga cgactagcga 300
gtcgaatcag acgcaacgt acgcgttta gagcgagatt ggatggtgta caagtaaaag 360
tttcagagt cttggtttc cacggaatg 389

<210> 3887
<211> 406
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-D7
<400> 3887

ggtaccagtc tagaattccc gggccgaccc acgcgtcagc agaaatacaa gaagaaagcc 60
tatagaggcg acaagaccat gacgcaaact tttggaaat cgctgcacaa cagcaacgt 120
aaaggcggaa gacaaacaag ggcacacaac tacaagagct attcctacta ttagggtaa 180
tgtcatagtg tcgcgataac cctcgaatgg ttcaaggg aactgatcaa taatattgc 240
caagtacgcg tttaaacctg cagctggtgc cagtgtaagg ggaagattgg taaagagtcc 300
gattaggata gagccagctg ctcctgtgat agctgtcgca actgctactt caaaactcgg 360

tacggaagct tttgtggaga ataattgaga gttgagaagt taaaca

406

<210> 3888
<211> 223
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-D9

<400> 3888

accacgcgtc cgccccacgca tccggaagg tttcgttatt ggaacgactg attcgtcagc 60
tgggagtgac tatggacaca ttatctgaac tttccgattc caacaaggaa aagaaaatgga 120
gcttacatga ttatgttatt tgagaagata tatgtttgt aaacgaacaa gaagctctt 180
ctacttgtaa atatcgagtt attcgatgaa tattttgaa aaa 223

<210> 3889
<211> 385
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-E4

<400> 3889

gaccccacgca tccacccacg cgtccgcccc caacgacttgc gacgcgtggg cggacgcgtg 60
ggcacttgtt gaggttagtta agcacaattt gggttgggtt ttcaagcttg tcttaaaccc 120
gtggagtaa aaacgacgaa attgaagcaa gctagaacct ttaccataca atggaatcaa 180
ctcagtgaaat gcaaggaccaa gaatatgcga agattactct gttttacttg ctttggtcag 240
tcatcggttat ccgacaacta tggttatattt gagcaaggta cgatgcagag cctcgtggaa 300
atttggtaa aaatcaaatac cgtgtagaac acaattattt tcagcaagtgc ccgaccaagt 360
ggaaggaaatt gggaaaggat gttca 385

<210> 3890
<211> 281
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-E8

<400> 3890

ggtagggc cagaattccc gggccgaccc acgcgtcagc ccacgcgtcc gcccacgcgt 60
ccgccccacgc gtccgcccac gcgtccgccc acgcgtccgg agatgtattt cagtaactac 120
aagtttatcg gcagatcatt tccaatcggt gagtcctgat gtgatcaaag aacatccggg 180
agtcattacg attgccgata ttttgggtt tgagaattt cagggatctt gtaatgacga 240
cgacgacgag gacaaaaaac aacaataaat ggttgcggg t 281

<210> 3891
<211> 394
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-010-Q1-E1-F4

<400> 3891

cgggcccacc cacgcgtcca cggacgcgtg ggaagaagac gagtcaatgg aaagcaaatc 60
ggtgaccaa aaaggcaatg caatgaaaca agtagaaatg gaggatactc atcaagttc 120
agacactgtt gttgctcatg gagagggcgtc ggatacccg ttggnaatgg gacgatcaac 180
tctacccgaa aaacaacaac aacaactacc accgccaatc gaggaacaag aaacgcgaaa 240
taatctaggc gaacagtcag agtcaactag ttgcatcggt gagagcacag aaagctgtaa 300
tatagcacca aaagctgaca ctataagcct cccaaacctc cgtagcgatg caactttat 360
taagaacatc gctcagaaat tgtgcactgt taat 394

<210> 3892
<211> 407
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-010-Q1-E1-F7

<400> 3892

ggtagggc tagaattccc gggccgaccc acgcgtccac attatgtattt attcgagtgt 60
tatcttaca caaacgggag tctctacaaa agatgctata ttggcaagtc ttgggtgcagg 120
aatattaaac tttttatgg ctcttccagc cattccaacg atcgaccgat ggggcagacg 180
tcctttgttg ctatggacat tcccactcat gagcatctt ttattatgg ctggctttc 240

cttttggct tcgtctagtc atactcgaaa gggattggtt gctgctggta tttatctgtt 300
tatgattgtt tattctccag gagaaggacc tgttccattt acttattcta gtgaagtatt 360
tcccccttat attcgtaactt gggaaatgag ctnttgcacc gcaacta 407

<210> 3893
<211> 304
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-G11

<400> 3893

aagaggcaaa tacgggaaag cagtaaaaga agaaagagaa aggaaaaaac tgagtatcat 60
gaagaaaaaga gggagtagat gagaaagaa agatcaagga agtaagagta agagaaggag 120
taatgtgaat gaaagcagga aagtatttga agaagagagt gtaaagcgcg tacctttgc 180
ataatgtccc agcgagtgaa agaggaagca aaatataaaa aaaaaaaaaa aaaaaaaaaa 240
aaaaaaaaataa aaaaaaaaaac gaaaaaaaaa aaacaaaaat aaaaaaaaaac aaaaaaaaaa 300
caac 304

<210> 3894
<211> 289
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-G2

<400> 3894

aagcaagaaa gtatttgaag aatagagtgt aaaacgcgtt actttgcattt aatgtctcaa 60
ccaattaaag aaggagccaa aagaaagaaa aagaagtatc caagtaagac cccaaactaa 120
ttgatcctaa gctgttcaaa ccaagttaaag gtgaaccaat aactgtggaa aaagattttg 180
aaaaaaattgc ataaagggtt aaaggccaat caaaactaat tataactggt actcctccaa 240
agctaaataa ctaacgtatg caagaaagaa gaaagtaaaa gaatagaaaa 289

<210> 3895
<211> 374
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-G4

<400> 3895

ggccgcaccc acgcgtccac ccaagcgtcc gcggacgcgt gggttgtcaa ggaaaaatt 60
acttgaacc cggagaaaaaa caattggga ctggaaacaa tccaaaacat ttggaaaacc 120
ccgttaatt ggccaattaa aattgaaatt gcattccaa accaatggc attaaggga 180
ggtcctaagg gggccaagct acattggcg gggccctatt tactccagaa ctttattctt 240
gtggagtaga tattgttggc cttccaact tgaaaacatt attagatagt gttcctgatt 300
attggaagcc gatgaagaaa gaattactgt tgagaattgg tcccgtagac accgacgaag 360
aattcaatca aaag 374

<210> 3896

<211> 326

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-G6

<400> 3896

ttcccgccc gacccacgcg tcagcagttt actgcaatgt ttcgacgcaa agctttctt 60
cattggata caggagaagg aatggacgag atggagttt cagaagcaga aagcaatatg 120
aacgatttgg tttcagaata tcaacaatac caagaggcta ctgctgaaga cgggcttgac 180
gtggattttg aagaagaagc gtttaagct ttgtgtcaat acacacaatt ccttggatat 240
cgcctcgacc tttcatttgc aaactattca gaataccgtg actatttctc cgcaattcag 300
tgatggataa agaaagatgt ttttag 326

<210> 3897

<211> 400

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-H10

<400> 3897

attcacgggt cgacgcacgc gtccgggatt gaccaagtgt gagaagcaaa gtcaatggaa 60
aaggaagagg aaaggcgaaa aaagtagcga ataaatctag agtagaaagc tgtgagagga 120

aagaggtgta tcatgcaggc aaagaagtga cgcagtagat cagagagtaa cacatgcaag 180
tagttaaagc gaacgggtga gtaaagaggt gtgaaagagt ggaagaacat gaaagcacag 240
aagaaagatc aaggaagtaa gagtaagaga aggagtaatg tgaatgaaag cagggaaagta 300
tttgaagaag agagtgtaaa gcgcgtacct tttgcataat gtcccgacgca gtgaaagagg 360
aagcaaaaaag aaagaaaaaag aagtagccag gtaagacccg 400

<210> 3898
<211> 449
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-H5

<400> 3898

gtacaggtct agaattcccg ggccgaccca cgcgtccacc cacgcgtccg caaccgtttt 60
tcgcagctcc aaccagcagc atcagtcagc ctacagtcgt tttcaacggg ccacttttg 120
ctgcagcacc aactttcagt cctttacaa ctgctgttcc tagttcagt tcaggagctg 180
tttccagtgg attcccatca ttctctcccg ttccaaccag tacctttca agtgacgtga 240
atggaaatac tctttccaca ttttcttcgt ttccggcacc aacttcaact ataccgatac 300
aaacaactat cttttctaa gcaggtagaa caagaagttc gatgagaatc acaacagtgt 360
ctgatatata gaaaagattt gattgtgtt gatgacacaa aatatcatcg tgcaaagtca 420
aaggacttta aaaagttgcc tttatattt 449

<210> 3899
<211> 429
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-A2

<400> 3899

gtccacgcac gcgtccgaag ctcttcctta tatttttgt gcttggacaa tggttgcaaa 60
gactgctctg agttgcctct ttctctctt ctttatcgct gccgcagttg cagccgacgt 120
agtttcagat gacagatggg gatatgctca gcaaactcaa caacagcaac agtgccaaca 180
agtatgtaaa cagtagtgcactatcagag tccagtcgtc acttccgtaa ccacacagag 240

cccatactgg acccaatgct cgaagactgt gcaaaccctt gtcccaagcc agtgcagtac 300
ttatacccaa ttcctacat ggacctattg cagcacctac accaccacta gcgtaccatc 360
tcaatgcagc aaggccgtga ctacctatac tcaaaccctgc tgtgcttatg cccaacaaac 420
ttcctatgc 429

<210> 3900
<211> 360
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-B3
<400> 3900

gtcgaccgac gcgtccgcgg acgcatgggg gttgttgtgg ttgcgagatg gtgtacagtc 60
gtttgtcctt gtcttttaac gtcacattta ctttcaaag taacgttgct tcaaattttg 120
aagcaaagtt tagttgtaaa acaagaaaaa cctttatagg ggaagggttt ttacatgttg 180
gccctcttt caaacagagg agcttcttt accaatgcaa gcagattcca cgttgtgaac 240
ttgttgcgtc tttacaaaac gacgagagta caaaagatga agaatcgtca agttttcact 300
gggctaagat ttttattcct gacagtatga aaattgacaa caaatatgcc aacgtgtgg 360

<210> 3901
<211> 163
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-B5
<400> 3901

tccccgggtcc acccacgacg tccgaacacg cgtccgataa tgcaaataata gggcggcccg 60
ataaacgaga tggcgtacga cgtgatacac actttgacaca atatcgacca tatctaaatt 120
cgatgtaaaa gctacattca acgactagaa tatgttcaga att 163

<210> 3902
<211> 456
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-B6

<400> 3902

gtcctacatt cccgggtcca cccacgcgtc cgaaccacgt tggtaaagat agacttgtct 60
caaggcagct tttaaagtact ccaagactgt gacagagatt tagaatgtga tcataatacc 120
aagtttca gtggaaacttat tcagttatggt ctctttcac ctggttttg gacgagagaa 180
aatgttctgc tcttctatattt ggagctcggt tcaggtgtat tcataaggga cactctccac 240
cttttctaca acaaaggta agaacatctg tttgcgagtt taacgctgtt gttggagaca 300
caagtttcac tggatgcaga cataaaagca aactgggaga aacgacactt tatcgtttgc 360
ctcaacgtca tgtctttgtg tgacgaatat caacgacagt attcaaaaact atgttcaccc 420
aaatgaaagc acgattcata tgccaccaat taacag 456

<210> 3903

<211> 378

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-B9

<400> 3903

cgattcggag agaaaagaac tgttatcagt gatgagagaa aatgcaacag aacgactgca 60
gctggctaga attcagggag cttacgttcc acccgccaga atgccgattt ccctgtcctt 120
gaactatcta catccgaacc cgtttgaaaa ggattcacga tatgaggaat ttcaaccaga 180
aaaagaaaaag gtgaagtttgc atcctggtaa tacaaggaga ggtggatca tggaaagccat 240
gttgggggaa aaagataaaa tgagaaatgg gattaccagt agaaaaggtt ctcctggctc 300
tactatgggc tccaacacga aagctattaa accggggaaaa ttacaataaa aaagtagcaa 360
ctataggatt aaaacaaaa 378

<210> 3904

<211> 422

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-C1

<400> 3904

gtcgaccgac gcgtccgcac acgcatccgt cttgtagaa aactatgaag tcttcggaa 60

ttgctattgt tttcctaagc tttgttattg catcttatgc agcagttgta tccgaaatgg 120
catccaatga gtttcaaaga ggaggatacg ctccttctcc ttccaaggaa tgctgcatga 180
ccacttgtca atatgcagaa ct当地ccaa tttctcaacc aacttatagc caagctccat 240
cttacattcc atctcctacc tatggccaag ctccttccta caatcaatat tcttcttcgt 300
acggttcctc tagctatcgt ctcttaactg cagacgaaaa ccaacttgtg agcagaggag 360
gttatgcacc aacaagccaa tgtattctag ttcctatcca atgctgcact gattgcaaac 420
aa 422

<210> 3905
<211> 313
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-C12

<400> 3905

tcgaccacg acgtccgaaa caaaatacgc cggtgttga tgttcctctg gcctgactat 60
cttggcgaa taagcttga taggatttc gggtagttt ggtataagtg attgtggctt 120
tttttgtt tttgtgttgg atgtcgaata aaaaaaaaaag gagtgagaat gaacaataaa 180
aaaaaaaaat aaggaaaaaaa aaaaaaaaaa aaataaaaaaa aaagacggga aatgaaacaa 240
aatcctcata acaaaaaacaa gaagtaaaag aaaaaaaaaaca aacagtaat ttgccttaaa 300
aagtatgtt gtt 313

<210> 3906
<211> 342
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-011-Q1-E1-C2

<400> 3906

tattactgtc gtggtttggta tatttgctat gtttattgtt tgtgggcct ttgcaggttt 60
gaggangaaa agttgttttc cgaataggag gcgtcgcgtt tctcgcgagg cgcctgcna 120
agaacatgga gttgcttcgg caaacgataa ctatagttcg ctcctttt 180

taatgtctac ctgccacg_{tc} ttgatacaat agcgcctgaa atagtgtacg gaagccaaga 240
atccttctg aaacaagaac gacagtgaa aaaacgcttt gtgaaggc_{tt} acatgtccc_a 300
gccggattc aaacaagacg aagaagagga tagttgtcc ct 342

<210> 3907
<211> 342
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-C5

<400> 3907

gacgactggc gatgaaaacg acttggagac cgacatggc acttatccat cgactttatg 60
taaaaaccac aagtagaatt gttcatcaac caaaactggg ttttcaaaca agccctttc 120
aaacgtccct ttttgtc_{tt} tcgtctgctg aacaagaaca aggccgggtcc tcgaaaagtc 180
gccagtctca tgctttgcc tccttgcta ccgtacgc cactgtattt ggtaccattt 240
atatgacgtg tcccattttg aaagcagacg atgagactct agagcctcca aaataccctt 300
ggaaccattc tggcctttg tcttc_{tt} atgcccgtgc ca 342

<210> 3908
<211> 256
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-C7

<400> 3908

ccgggtccac ccacgacg_{tc} cgagaactcg agtcctt_{gtt} gaaagaacga gatgctattt 60
tgaatggaac aagtgaagaa tacttgagtc aattggcgcc ttttagagaat gaaaggaaac 120
gtaaactcga tagagctatg gactttatc aacttcaact acaatatgca gaacagctgt 180
atgagttggc caagaaagaa gcata_tgata gctttcaagc acacaaggca gatcattgag 240
aacat_tatgtg gcgtat 256

<210> 3909
<211> 423
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-D1
<400> 3909
gtccacccac gcgtccgaac caaagcgccg gtggcatttgc cttgaaactt tactaagaaa 60
caacttatga gcgacagtgc ttccatggaa gaaacaaaga gtgtagccac tttgtttca 120
ttgggtttta aaactgttcg aaggcctcgc gcgagagata gtgacgatttgc cacgctttcg 180
gaaggagagc aaccgaaaaaa gagaaatgc gtcgagttgt cgagctatttgc aagtgtatctt 240
ggctcaatc ataagaaact ggataaagcg aacaacttctt acaagcttaag gcaatctatg 300
gatcatttctt cgtttccga cgaaaaccca gaggaagcga tggaagttcc ggcgtctcct 360
gatagaacac cgaaaaaggca aatttttcc aacagagttt aaaaaacagt tccccctacc 420
cct 423

<210> 3910
<211> 395
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-011-Q1-E1-D10
<400> 3910
tccgggtcga cccacgacgt ccgaaagctt atgagaatgc ctggcatttgc gcaatttgctg 60
gtgaatttggaa gtcttctggaa gttgtggttc aaagcataac tcctttcttc attacgagtg 120
aatgagcaa gatacgcaaa tccagttgg cagttccttc agctgagcga tttgctcgag 180
atagttaaa gagtgttggaa tatgaagtgt ctgcatttcc ttattggttt catgaattcc 240
ttgcactagt tatttcctat ttaccttgc aactacagat tcgctatgtt gccaagttac 300
atcgtggcct tcgtaaaaaa ggattgcgaa agatgtcttc tgcagaatag aagagtagaa 360
tatgatgtgg tgattagtct ttggagaaat ttgtt 395

<210> 3911
<211> 379
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-011-Q1-E1-D12
<400> 3911

tcgaccacg acgtccggaa tgaagggaaat ttatggcaaa aacacgtgcc agcagcagcg 60
gtaaaacgtg tgttagcaagc gtagagcaga agaactgggt gttaaggctcg agtagtagag 120
taagtgtaaa aggaaagga aaggagagaa agaggaaagg gatgaaatgc agagatctct 180
agagaaaggc aagaaagaaaa agaaaggaag acacattaaa tgaggcgaga aagcatagga 240
agtgaaacgg attaggaacc cgtgttgtct atgcagtaaa agaaagaatg agtaagaaaa 300
aagggagtca ttccaccagg ggagtaaagg cgcaagaaag aaaccaaagc aattgacggg 360
aatcgaaaaa aagggtgga 379

<210> 3912
<211> 229
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-D2

<400> 3912

ttcacgggtc cacccacgctg tccgaagaca aggaaggaat tcctccagac cagcaacgtt 60
tgatatttgc tgaaaagcaa ctagaagatg gtcgtactct ttcagactat aatattcaaa 120
aggagtctac tcttcacttg gtattgcgtt tgaggggtgg ttgctaaata tttcagcaag 180
tagtttagtt tagcccttat tttctgaata aatattcgca gtttttgc 229

<210> 3913
<211> 150
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-D9

<400> 3913

gtgagtcgta ttaccaccag cattggaaat gaaacagtcc gcggattatt gcattggac 60
gattgataga agctggacaa gccggtagtt aattgttcgg ggggagcagc cagagactag 120
tagtcaaata cacggcttgc aaagcgctac 150

<210> 3914
<211> 385
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-011-Q1-E1-E1

<400> 3914

ggtcgacgca cgctccgac cacgcgtccg ggtatctgcg gttagaacata tgaaagaagc 60
aacaccgact gtttagcana aacacagcac tctgcaaaaa agagaaaatg taaagtatag 120
agtgtgcggc ctgccagata gtagagaaga aatcgatgaa agtgaagcgc agtaaaagat 180
gaggtatana gaatggcggt cctaacggta aggtccaaa ggtagcgaag taaataaacf 240
tttggaaaggc gtccagttatg aaaggagatt accgtttgtg gtgtttgtgt gtgtgttggg 300
aagagagaga tggataccgg aaaaccttaa acttctgtac gcctaaggag tacaacccga 360
gcaaaaaacca gcgaatcaa gaaaa 385

<210> 3915
<211> 295
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-011-Q1-E1-E4

<400> 3915

ttcaagggtc cacccacgac tccggacttt ggaaagctt tgtgagaaaa gggatggta 60
accgaatggg taaatttcaa aactcggaca aagtaaaaaa gcaatttcct gttgcagggg 120
aatgcaaggg gccgaacacg actcttcaact ggaagaagaa aaatttggga ctttgacagc 180
gacgatgatg catgttccta ctgtaaaact tgtcagttgc gaagaagact ggaaaaaagg 240
ctancancga aaaagataca caaccaaact agaaacccaa cgaagaccac atacg 295

<210> 3916
<211> 143
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-E8

<400> 3916

acaacaccct atagttagtc gtattaggag cacatacaga agagaagctt tccgaggaga 60
attttgtctg caatagtatg aggcaagtgc tgactgacac aatagacttg cgagaaagag 120

tagagcacac atgcacagaa tgg

143

<210> 3917

<211> 346

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-F10

<400> 3917

acaaaaacctt aaagttagtc gtattaagcg ctttatgaag tgcatgtctt ttcagatcac 60

acaaccactt ctgcactgaa tgaacgacgt atgggtacta actgtgcatt ttggggatcg 120

agcaaggatg tcaaataatgt tatcaactag gatttcccga atactagaca acactatgtt 180

catcgatttgcgtcactgg tcgtgctggt gcccttggca actccatac ctttttca 240

ccggtaaat tccgtgttagc gaacgaatta gtttaacttgt tgcgagatcc tcgacacgac 300

attcctcccc agttggctcg tttcataaaaa acttcggcct ttggcg 346

<210> 3918

<211> 268

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-F9

<400> 3918

cccacgagtc caaagaagga ctaatgatga ttactcacac aaccatttg aacaaagagg 60

caatttctgg aatacaatac cagacgaaag agacaggaaa aatctgactc tcacgaagat 120

tcgaggaaat aaatgaggaa aaagccata caccaagaaa atgtctcatc ataaggtcag 180

aaggaattcg agatcaacat agggtaggct taaaagcatc taaacataga ggaaagcggt 240

aaagcatcac tgaacagaac tccgatcc 268

<210> 3919

<211> 231

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-G10

<400> 3919

aacagaaaact caaggaaggta aacgtaccc acgagttta ttattatccc aaagcaggac 60
atgccttat gaatccaccc gatggagggt ttacggatga aatgagatcg aaagtggaaa 120
tggcggtcc ttatgtgaa gagagtagac aattggcggt gtccagaatg ttggaaattt 180
tccgtaaaaa cttgtcgct taaataaagt gtgttggtt ttttgtgaaa a 231

<210> 3920
<211> 317
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-G9

<400> 3920

atccccgggt cgaccccacac gtccggcccg agaaaggaga gggcgtaaga cgtgatacag 60
agtaggaaga aaagagaaga gagctagaaa ggaggtaaaa gaagagtaaa aggactagaa 120
gaggtacgga attcacgagg aaggagcgtg aaggaaggag gaatcccaag taatcgagga 180
agaaaaaagct tcggtgaaag cgtgaacgga ttttgacac actgcccgtc aagttctgga 240
agtgtgctag gaataagcag gagaagtaga agagagtagg aaaagaagaa aggaagtgaa 300
gacgtaagac gtgaaaaa 317

<210> 3921
<211> 304
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-H11

<400> 3921

ggttgagatt ggtttctt tcgtccacgc ttcgttccgt tacttttgc cgtgacaagt 60
tataatataa aatggccaaa gtaaacccctg tgcgtcgcc tcctaaacta agtgtaacta 120
gagagatagc tatcggtatt gggcttgta tagcgtgtgc tatggtattt cggcaggcc 180
atctcgata cacggaaatg ataagaaaat attatcgca gttggatgag caagaacaga 240
gttcctcgcc gtcgtgaaaa ccgccttgc tttgtgagat aacaataagt ggaaccttgt 300
ttcc 304

<210> 3922

<211> 401
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-A5

<400> 3922

gggtcgaccc acgcattccgc acagggata agttgttgg aaaaactattg tttcctgtgg 60
aacgggtggc atgttcgttg ttccatggataaaggagga gaaggaggag atgagtagtg 120
gaaatggcaa agtgttcatg gaagagaacc atgagcctgg gaaaaccacg accagtgcgt 180
tggcctatgt caaacaatat tctccatgtaaaagaggc ctcctagtgt cggtgatcaa 240
cgaaatgtgg ttccctaggt ggatagatac aaagataggt ataatatcga gctttttat 300
tccttggcg gataacgatg atatcgagac cacaaaaaaa aacaccagag caaccgcctg 360
tatcctttt gttccccca acaacaacac tagtcgaata t 401

<210> 3923
<211> 428
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-A7

<400> 3923

gtactagtct agaattcccg ggccgaccca cgcgtcagga agagacggtg agagcaatga 60
accacgtcat cgaccgtggatatgcattatttggaaac tagtgagtgg tcagctcagg 120
aaattacaga ggcttgcga gtcgcggatc ggaatggcct tattcgtccg ttgtgtgaac 180
aaccacaata taatataattc catcgtcatc gagtagagat agaatacgaa cctctttata 240
gagagttgg tttaggtacg acgatttggcaccttggc ctgggtata ttatccggaa 300
aatacagtgg gaagaatatt cccgaaggta caagattatc tctggagaag tacaagtggc 360
tgaaagatac tgcatatca gaaagagagt ggcaaattga aaagacggat cagttaaagc 420
caatagct 428

<210> 3924
<211> 421
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-B10

<400> 3924

aagctttcc ttatattctt tgtgcttgga caatggttgc aaagactgct ctgagttgcc 60
tctttctctc tttccttatac gctgcccgag ttgcagccga cgttagttca gaggagagat 120
ggggatatgc tcagcaaacc caacaacagc aacagtgcac acaagtatgt aaacagtatg 180
catactatca gagtccagtc tgcaacttccg taaccacaca gagcccatac tggacccaat 240
gctcgaagac tgtgcaaacc tttgtccaa gccagtgcag tacttatacc caatctccta 300
catggaccta ttgcagcacc tacaccacca cttagcgtacc atctcaatgc agcaaggccg 360
tgactaccta tactcaaacc tgctgtgctt atgccaaca aacttcttat gcagtcagta 420
c 421

<210> 3925

<211> 466

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-B11

<400> 3925

ggtataaggc cagaagtccc gggtcgaccc acgagtcgg cggtgtggta gtggacaact 60
tggctttatt gctggAACCT ttacttgtta ttcaactccat tgtggcaata ttcttcacag 120
aacgaatagt ttctgcccTT ttgcagttc ttttccaag gttcacacac catTTTGTGc 180
tagTTTCGT catcaaggaa tgtgcaaggc ctcgctctcc tcaagtccTT ttctgactc 240
agcagagcca gatcacgagt tgacagcaaa tgaacatctc aacttgcatt ggatgggtat 300
tttagtact ttttggta tggtgccaga aactgccat gcttctcgt tggacacctt 360
gaaagatatt ttcaagagca agccggcttc tctgctacat cctctggta tggtggagtt 420
tttaggaact tctttgtata cttccattt gggttatcag tcgagg 466

<210> 3926

<211> 317

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-B4

<400> 3926
cacgcgtcca atcagatgaa aatggtgagg tgaaaagctt ataaaaatgt tccacccaag 60
gtcttacgt gaaggttga tatacaagat gtaaataata tctttgtgtg atatcaaacc 120
gcgaataagg accgagatca aaaatcgcbc ttgacgatac gggggagtgc atcaagtaaa 180
agtctctcat ctcagacttc gcgaaacatt attaaaaagt tttccttatac acaacttatac 240
tcgaaataat aaacgatttt gaagaaaaaa aaaaaaaaaa caaaaaacaa aaaaaaacaa 300
caagacaaaa agaacac 317

<210> 3927
<211> 331
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-B5

<400> 3927
ccacgcattcc gcagacgcgt gggccagcaa ggaaataaaag cgtttataca agcgcttcca 60
gaaaactagat agaaacagct cggaaactat tgagagtgaa gaactttata tgattccaga 120
acttgcaatg aatcccttgg ttcctcgcat tgtttcttg tttgacggag ttaattttcg 180
tcagttgtt tccttgttga gtgtgttag tgcaactgca ccgaagaacg agaagattga 240
ctttgctttt cgtatatacg atgtggacaa cgatggagt atttccctca acgacctgg 300
tgacttgttta cgaatgatgg tcggtaataa c 331

<210> 3928
<211> 411
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-B7

<400> 3928
aattcccccggg ccgacccacg catccaccca cgcgtccgccc cacgcgtccg cggacgcgtg 60
ggggaaaatt gggcaatgta cagggaaagta tgacccagta atgaggagtg gagtaaacag 120
aaaaggaagt aaaaggaggg aatgaaggga agttatggca aaaacacgtg ccagcagcag 180
cggtaaaacg tgttagcaa gcgttagagca gaagaactgg gtgtaaaggt cgagtagtag 240

agtaagtgt a aaggaaag gaaaggagag aaagaggaaa gggatgaaat gcagagatct 300
ctagagaaag gcaagaaaga aaagaagga agacacagta aatgaggcga gaaagcatag 360
gaagtgaaac ggattaagaa cccgtgttgt ctatgcagta aaagaaagaa t 411

<210> 3929
<211> 432
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-012-Q1-E1-B9

<400> 3929

cccggtcga cccacgacgt ccgattggaa tgtattcctc atctcggtgc caaacatatt 60
acagagtgtt taagtattcc aactatcggt ataggagctg gaaaatatac tttaggacaa 120
gttttagtat atcacgatat gattgaaatg ttacaacatc cacatcatgc caaagttact 180
ccaaagtttt gcaagaaata tgctcaagta ggagaagcta tacaagaagc attggaaaac 240
tatcgatg aagtgtatgca aggaaaattt cctaattaaa catatagtcc ttatcatatt 300
tcagaagaag aatatgaaaa gtttgataaa gaaatgcaaa agcttcgtcc tcncgtgtcc 360
tcctcgctg caaccattcc cgacaatctt cacgagaatg tgcagttgt a tggagatacg 420
anatagaaaa ct 432

<210> 3930
<211> 409
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-C12

<400> 3930

gagaatggac gataaggaac taggcaaaag gatatggat ctgcggtaga acatatgaaa 60
gaagcagcac cgactgttta gcaaaaacac agcactctgc agaaaagaga aatgtaaag 120
tatagagtgt gcccctgcc aaatagtata gaagaaatcg atgaaagtga aagcgagtaa 180
aagatgaggt atagagaatg gcggtctaa cagtaaggat ccaaaggtag cgaagtaat 240
agacgttga aaggcgtcca gtatgaaagg agaaacgagt gtagcactgt ctagtcgtcc 300
aactcagcga aacagcaata actgtgaaaa tgcagtaaac tagcagtagg acggaaagac 360

ccataattc ttgactagat aggttaggg aggagagaga atcatgaag 409

<210> 3931
<211> 447
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-012-Q1-E1-C7
<400> 3931

aattccccggg ccgacccacg cgtcaaaaga gatggcataa ggggtgaaag gccggttatg 60
atcgacatat tactatttc tctccagagg gacgactata tcaagttagaa tatgccttta 120
aggctgtaaa gtcagtagga attaccaccc ttgctgtaaa ggggctggat gcagtttgt 180
gagtaactca aaagaagggtt ccagataagc tcattgaccc taaatcagtc accaatgttt 240
tccgaatatac ggatcaccac ggctgtatTT tcactggact tgcaacggac gcaagggcac 300
aactacaacg aacacgatcg gaagcagcag atttcaagtt taagtttggta tacgaaatcc 360
cggttgacca gatagcgaaa agattggcgg acatcaatca agtttataacc caacacgcat 420
atatgagacc ttttaggagtt tcactta 447

<210> 3932
<211> 410
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-012-Q1-E1-C8
<400> 3932

gaccacgca tccatgtcaa cgtgggtcta agaaaatatt attgctttat tggtaatag 60
acaaggtaa taagaaacat tgtgtgtta gtgtaaaaag aattgcaact cgtgtacgaa 120
gcatttttag agataaagag agttgccaa tgagcaatgc acagagtgtc gggtcctcg 180
tagacgacga cttaagatt ccagaggaca taaaagtaag tgaaaaggag aagtaaatgt 240
aaaaactata tatttcgata gtgtccttgtt attgctcagc ttgtagaaag ttcttgtaaa 300
agtgagtttc tcacttcgtt tcggttac ttggaaaatc gccagggtgg gaagggacac 360
ctcatctgtta ggacagaact tgaccagatg gaatcctgtta tgcgaaaaca 410

<210> 3933
<211> 395
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-D6

<400> 3933

aattcccggt tcgacccacg catccaagcc aagataaggt atcaaagtaa agaaagaagg 60
aaaaggagaa gaagagaggg taggcttaga agcagcaaac cagagaggaa agcgtaaag 120
catgaaagaa aagaaatccg aaaaagaaga gaaaaaggta agaaagagga ccgaatcagg 180
gtaagaggtt gaggagcaag aagagaagag agaatgctgg gtggagtgc gaaacaagag 240
aagggaagta aaaggtaaga aagagggaaag gtttacgaga gaaggaagta gaaagaagag 300
agtgttaaggc ggcgtcataa tagaaatccg aaaggagtag aagaaaaagag agagaagaaa 360
gaaaagaaga gaaaagccgt actgaagaac gacac 395

<210> 3934
<211> 435
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-D9

<400> 3934

gggtcgaccc acgagtccgg atgcgcaatg attgttccg tggcaactcc tgaagtgaca 60
actactcctt ctactctaga gaaaagacga aatagtgact cgttattacc ttcacaagct 120
gaaagttaa aagatggttt caaacaagtg gaagaacaac acagacgaga tttaaaaaag 180
ctcgaaaggc ggtataaaaag cgctgtgaaa cagctgcaac tgaagcacag ggtatgcaa 240
gtgttggaaag caaagaatac aggtggtgta agtaaggaag aggagaagtg acccataaag 300
tcatgagggg gattgtggga gtgggaatgt tgccctttca tcctttttt ctgaggttca 360
gaggaatgtg atggtagaag ttaacatcat tatagagaat atttgtatat aggaaactacg 420
atacagtggt tttta 435

<210> 3935
<211> 356
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-E10

<400> 3935

gctcctacag gacttgttgt tcctgtgatc cgtattgtc agaatttcaa ctttcagaa 60
atcgaaaagg ctattcataa attgggtgaa caagcgagat tagggaaact aaccattcaa 120
gatatgcaag gcggtaacctt tactattcg aacggtggcg ttttcggttc tctcttatcc 180
acgcctatcc tcaatatgcc tcaaagtgc atattagaa tgcatgccat tcagaagagg 240
cctgttagtcg tgaatgatca gattgtcatc agacctatga tgtaccttgc cctttcttata 300
gaccatcgac tagttgacgg aaggaaagcg gtaacctttt taagaagaat caaaag 356

<210> 3936

<211> 275

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-E2

<400> 3936

ccacgcgtcc actaaggaa tcatacgaaat aatttcggaa ggagcggata gcttctaata 60
aaaatttagta tctagttatt caaaaaaaaaaaaaaaa aaaaaaaaaaaaaaaa aaaaaaaaaaag 120
gaaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa 180
aaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa aaaagaaaaaa aaaaaaaaaaaa 240
agagaaagaa aaaaaaaaaaaga aaaaaaaaaagag gaaaa 275

<210> 3937

<211> 74

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-E5

<400> 3937

aaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa 60
aagaaaaaaag aaga 74

<210> 3938

<211> 422

<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-012-Q1-E1-E8
<400> 3938

attcccggt cgacccacgc agtcaatttt acaatggtaa ataccgtcac tgatattctc 60
agttttctg cgaaagaaac ggcttggct aaacagcacc ttgaaagtat tttcactaat 120
agtgaggta ttacagctac agaaatacga gggatccatc tacacgtata gcagtggtaa 180
agagggctgt ggcataaaaag actacaacaa caaagcaagg gctgggtgct gctggaaatc 240
gaacccggga cctttgttt tttgaaccaa aaaaaaagac aatagataca gcttcactgc 300
tgctgaaaaa cgaaaaggat agacgttcag gaccttgct ccgtataacct gtcttctctc 360
aaaaaaaaaggg ttcatgtattg aacttggaaat catacgattt catatcgaa cattaaccca 420
aa 422

<210> 3939
<211> 187
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-012-Q1-E1-F11
<400> 3939

aaatggcaact tgcccttgga agagatatct tttctttca actagtggat gggatcctgg 60
aaacaggtta tctggcgata ggattccaag cttaggcgtag cttaggacgtt gtatgcctag 120
tcagtgtttt aacatacgaa aggtagcat gtgacgttcc ttgaaactcc aagacaagcc 180
tgtaaaaa 187

<210> 3940
<211> 398
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-012-Q1-E1-F6
<400> 3940

gacccacgca tccaaccgcg acgagataat gcagacggag cagtttgta gttgtttgt 60
gctttgtcaa gcttgtctca gtaatggaaa gcgacactcc tagttaataa catggcgtt 120

taatccatat aagtatagtt caagtcattc tcactagtac tcggaacaag tagtcgatag 180
ttttctactt gattttccag tgagaagttt gcaaaggaaa aggcaaaaga ggtaggcagt 240
ttaataactg ggaagtgaca catgtacaag tgagaccttt gacgaaaaca tttcactgtt 300
tgagaaaaaca acctaggta ctgcttcca tctacccaac tttgcaacga atactttgc 360
ttcattgctt ccacggcaga gttacaacct tttccaac 398

<210> 3941

<211> 455

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-F7

<400> 3941

aattggcggt tcgacccacg catccaccca cgcgtccggt aaaaggtaag aaagagggaaa 60
ggtttacgag agaaggaagt agaaagaaga gagtgtaagg cggcgtcata atagaaatcc 120
gaaaggagta gaagaaaaga gagagaagaa agaaaagaag agaaaagccg tactgaagac 180
cgacacaggt actcgaggag aaaggagacc caaattaagg tgagagaatg gacgataagg 240
aactaggcaa aaggatatgg tatctgcgga agaacatgag gaagaaagag gcaaatacgg 300
gaaagcagta aaagaagaaa gagaaaggaa aaaactgagt atcaggaaga aaagagggag 360
tagatgagga aagaaagatc aacgaagtaa gagtaagaga aggagtaatg tttaatgaaa 420
gcacggaaag tatttgaaga agagagtgt aagcg 455

<210> 3942

<211> 402

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-F8

<400> 3942

gaccacgcgca tccagatttg tccaaaatttgaagcgcgcc aaaagttca aactgtgttg 60
ttatgactat gccatttgc tttgtatttgc atacgacttt taagtttca aaaattcctt 120
atcgaaggcgc ttctaccgac ctatgtaaac ccaagcacccg ttctgttcca ttgaaacaca 180
ataccacgc ggtcttcttc aaggagaccg aaaagacaaa gtctacagaa cctgttaatg 240

ttaccagcgc tcccaactca aactcaaagt cggtcacatt tgacggacag ttgaataagt 300
ctgcttctaa tacatctcca cgaaccaata tatctctgga ctctgcaaag ttaaaggagt 360
actcttcgaa gttcccaac gatatttctt tgcgaccgg gt 402

<210> 3943
<211> 382
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-F9

<400> 3943

aaaacccctc aagcgtggtg gagagacgag ctagataaaa ccaaaaaaga tatgggagga 60
ttctttccgg ttttgcggtt ggtactggag ttggtgtgta tgtggcacaa 120
aactatcgcg ttcccaacgt gcagtggtgg ttgcaacaaa ccacggatat tgtgaggaga 180
atggaaagac aagcacgcaa gtctcaagag gaaaaatagt gaaagaagaa ggttttttt 240
ggcgccttgt ggagaagaaa caaagctatt gctgggaat gaatccatat ccaattattt 300
atagatatat atacatatat atgttagcacf gttatttgtg gttccaatt ctttgaaat 360
aaaaatgctg tagttggaat ag 382

<210> 3944
<211> 361
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-G1

<400> 3944

attccttta cccctttt ggtattttgc tgcctcaag cagtcattttt gggtttccata 60
ccgactatat caactatgtttt ccccttagga caaagtgaaa gttgccactg ttcccacgta 120
tctaaataca ggttggca gcgtttgtc gcacgcaact gtcgtcagcc tcggcaagga 180
acaatcttga taatgtcaag cacaagctct tcggacaatt gaaacagca gatacaagaa 240
agcatcaaga aagcggaga agcaacgcaa aagtatggaa aaaactcgaa agaaggcagct 300
gctgcctggg atgccgtgga agaactggat gcagaagctt ctcatcagag agttaaaaga 360
a 361

<210> 3945
<211> 390
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-G4

<400> 3945

acgcgtccag acaagttcta gatgcagcgg cctgccaaat agtagagaag aaatcgatga 60
aagtgaaagg gagtaaatga tgaggtatacg agaatggcgg tcctaacggt aaggatccaa 120
aggttagcgaa gttaatagac gtttcaaagg cgtccagtat gaaaggagaa acgagtgtag 180
cactgtctag tcgtccaact cagcgaaaca gcaataactg tgaaaatgca gtaaactagc 240
agtaggacgg aaagacccc taattttga cttagatagg tttagggagga gagagaatca 300
tgaagtagag gaggtgggt aagagatgaa agaccactgc atgaggataa ggaatctaac 360
tgagtaagga aaataagctt aagctagttt 390

<210> 3946
<211> 394
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-G6

<400> 3946

gccgacccac gcgtccacgg acgcgtggc ttcaagtgc ctgtcttga gagaagtggc 60
ctatcgattt gaactttttt ttgggttacg agagatccgt ttggAACGTA ttgaggaaag 120
catTTAAGA CTCACCTATC aggaaaaagt gggcaagtg tGATGCAgTT gtaactttat 180
aacttgaata tttcaatatg aacaaaaatt agaaaaagta tacacacgtg tctgaattaa 240
gcaattgcaa aaaagaaaaat caatacaatc gcttttcca cgcttccaa gtctcgtagt 300
caagacttag aatgagttga ttatcttcaa acgaaagttt cgatgtggta ctggaagtat 360
ccgTTcgaaa tggagcagaa gatgtgtttt cttt 394

<210> 3947
<211> 405
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-G8

<400> 3947

gtcgaccac gcagtccacc cacgcgtccg gtgggcctcc cagacggaag tgtttccact 60
ttgcaagtgg aacaagacgc tacagtagac caattaaaag aaaagatata ccaagaaaaag 120
aagttggcc ccaaaacaaa acggattcgt ctattttatt cggaaaatt attgagcgaa 180
ggaacttcaa agttagtaga ttgcaaagta gaagatggct cctatgtgca ctgtgttatac 240
tcagatgaag ttgcatctgg tcgtacgaac cacactcagg aaagaagcga acgtttacag 300
actcgcatTC ccgtggctga tccccagtca gagtatcgag gtttgaccg tctccgtgaa 360
gcaggtttgt acgaggaaga gataactgtt ctgcacgac aattt 405

<210> 3948

<211> 350

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-012-Q1-E1-H1

<400> 3948

cccacgcgtc cgaaagaaag aggcaaatac gggaaagcag taaaagaaga aagagaaaagg 60
aaaaaaactga gtatcagggaa gaaaagaggg agtagatgag gaaagaaaaga tcaaggaagt 120
aagagtaaga gaaggagtaa tgtaatgaa agcaggaaag tatttgaaga agagagtgtta 180
aagcgcgtac ctttgcata atgtcccagc gagtgaaaga ggaagcaaaa agaaagaaaa 240
agaagtagcc aggttaagacc cgaagctagt tgatcttatg ctgtccaagc gaagtaaggc 300
tgaaccagta tctgtggaaa aagatttggaa agagatggca taangggta 350

<210> 3949

<211> 414

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-H11

<400> 3949

accacgcgtc cgaagcttat tgtgccactt atttcctgc ttatgatatac ttaattgaat 60

gttacgaaga tgtggaaagt ggaaatgaga taaggtcggt tttacaagct tgtaagcgtc 120
accacaaaat acctatggc aagattgata caacccgaat gtggcaagtt ggcaagcaag 180
tcagaaaaac aagagaggaa tccagtattc ccatcggtcc ttttctgca ggtgtataca 240
ttgcagctat gatggctcag attgacattt tgatggaaaa gggacatccg gtttcggaaa 300
ttgtcaacga atccgtcata gaatctgttag actctctcaa tccatatatg catgccagag 360
gtgtttctta tatggtgat aattgttcta ctactgcaag acttggtgcg agaa 414

<210> 3950

<211> 331

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-H2

<400> 3950

cacgcgtcca agcaaaatac gccatgttgg tgtacaaaga cgctttaca ggtgtatgaag 60
tatgttccga cgccatgaaa aacctccatg aagaggaaaa cggtttgctg ttggtatgtg 120
actcgtacaa catttccaaa ggagggaaag attatggat agaagtaaac aacgatgaag 180
atgaagaagg aggaggagga ggatcagata atgcggtgaa acaagtgaat attgtggtcg 240
agtcgtttgg ttacaacct tttccatca gcaaaaagga ctttcaagta actatcaagc 300
gctatacgaa acgagtcaag gactatttgg a 331

<210> 3951

<211> 396

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-H4

<400> 3951

gggtcgcccc acgcgtccag cgatggatcg aggtcagttt gtgtatggatg gaggcccttt 60
aggcaatgat gggcggttgtt atccttgct cttatcgagt ttggcacaaa tggcctctcc 120
acctcttttc gagactcgcg aagctttct tttgaaaagt gttgtaaaga atggacgatt 180
gattttgggt cgtttgaaa accaagttca tgcaagtgtg gatcctgcat gcagtgatta 240
tggttattac catcatattt taagtagccg aggatgttcg agggcttgaa agggatacat 300

tgtatctact agtaatgaaa caacagcaac aacaacaaca acctcctcca agaatcaaga 360
gcgatattct gtagaatatg cgttatcgga tggaaa 396

<210> 3952
<211> 192
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-A1

<400> 3952

ctgcagcacg gtccggcatc cgggtcgagc cacgcgtccg ccacgagtcc gtaaaagcat 60
tagctgtggg agcggatgcc gtttgtattg gacgagcaat attacggggc ctgcataatgt 120
tggagttctg ggagtaaaga aagtttggc aatattaaag cggaaattga gagatggaat 180
gaaactttgt gg 192

<210> 3953
<211> 481
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-A12

<400> 3953

cggtctagaa ttacacggcc gacgcacgac tcaggtggac ttgtcgatcc gccagaaact 60
tgacaaggct attgtttca ccaagacatt atacaagggtt ttatgtgaca gaacctcaga 120
cgtgcaaaga gactattcgt ataactttt tattgcaaga cggAACaaaa aagcaagttg 180
aagcacctat aggaaagcat attctggagt tggcccacga aaacgatatac gacttggaaag 240
gtgcttgtga aggttcgttg gcgtgttcta ctgtcacgt atacttggac gaacagtcc 300
acaacaagtt acctgaggct tcggacgacg aaaacgatatac gttggacttg gctttggac 360
tgacagaata ttctaggctt ggttgcagg tagttgctag tccagaattt gatggtatgg 420
tgattacatt gcctcctgct acaagaaata tgatggtaga tgggcacgta tccaaacatt 480
a 481

<210> 3954
<211> 486
<212> DNA

<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-013-Q1-E1-A7

<400> 3954

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tgcgttaaag agctttctga gggtcaggtt ttaggaggc tttaagttt tttcgctcc 120
tttgaatcc taagttata gtggaaacta atcctgtcga ggccggagtcg acaatgacaa 180
tagaaaaacg aaatttgacg tggtttatac gccttagca gaagaagggt agctgcaagt 240
tagcccgagt gttgcattga ttggagttaa tctgttatat gcgcagcaga aaccgcta 300
actgtgctcg tggaaaaaac attccaacga ttgctgctgg cttcttgatt ttgaataatc 360
aacactgagc gaatangcct aanaaggagc aagcaaataa ctgctacgat gagctgagaa 420
cagcttaaga tcacgtctat tgcgttcaag cgttgctata gtctcaaccc aagctcaaca 480
aaaccc 486

<210> 3955
<211> 488
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-013-Q1-E1-A8

<400> 3955

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tattagtaat ggttgcacat gcgactcggg gctcgttagga tcacagcggta taccacttt 120
tcttaggaca tcttaagaga tattcacctg cttacgattc ggtgcacatcat ctgcgttcta 180
gttgcagttt tggagatggt gttggctttt taccgttgtt ggacaagttt tttcgaaacca 240
gttattatca gttaggatat cagtcgtttc ccagtgtgaa gcatcttgta gatgaaaagt 300
catcttgatt gtcatacatg tgtcgacaat agaagttttt ggctttgaat ttgataatca 360
acactgaagc gaataggcct aaaaggagc aagcaaataa ctgctacgat gagctgagaa 420
cagcttagga tcacgtctat tgcgttcaag cgttgctata gtctcaaccc aagctcaaca 480
naacccat 488

<210> 3956
<211> 292
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-B10

<400> 3956

ttcgacaatt ggtacagtct caaggtaaac caagtatat agcagcacaa acaatattat 60
ctttattaaa agaccataca acccaataaa acacccatac acacacacac accaacataa 120
tagaatcgat agaacgaaag aggtggaaaa agtaatagac gcgagtgttt tgtccactag 180
tagagaatat ttcttagtcc tttgttgcg acatccaaga tggattgtcc cgtgacgatg 240
gaagttgcca caataaacgt cacacctaca aaataaaaaa tggtaaaaat aa 292

<210> 3957
<211> 461
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-B12

<400> 3957

ggtaccggtc tagaattcac gggccgacgc acgcgtcagc ggacgcgtgg gcaacaaatt 60
cagcaaataa tgttaaaaat agaagagttt gaaaacgaca gaaatgaaca agaacttgtt 120
ttgaaacagt tgctgcctt gaacgaagat cgtaagtgtt ggagacaagt aggttaagtgt 180
tcttatttagt caaacggttt gacaagtaaa gccagtgtt gaagccacgta gtaaagagtt 240
gcagcaagcg atacaaaacc taaacgaaga gttaaaaaca aaggaatcg agtttcttga 300
actgaaagaa aagtacaaaaa ttcccggaaat ggactcgtcc tctatggctt cggcaccttc 360
ttcttcccaa gcaacaaaac cataagtcgt tgaaactcag ccgttattgt caagcactgg 420
cataaattgg ttccataga ttgccactgt gagagtattt c 461

<210> 3958
<211> 431
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-C11

<400> 3958

cggctctagaa ttaccgggcc gacccacgacg tccaccccacg cgtccgcccc cgcgatccat 60
gcctcctttt atgattctta ttttggctta cttaaatgat ggtacaatta tgaccatctc 120
caaggacaga gtcaaaccat cacctcatcc agatcggtgg aacttgggtg aagtgtttat 180
tcttgcaacg gcacttggct ggtggctcac tgcagcaact ctcatttact ttacaacttt 240
gtacaagaca tctttctgga cagatacttt tcctctgtac gcagattgga agaatccaa 300
gttgctcgct ataaggcctc catacttcac ttatggcct caaaatagtt ttatgctaaa 360
gtctctcatc tatctgcaag tatctatgat tggacaagct cttatcttct gtaccctgtc 420
atactggatg t 431

<210> 3959
<211> 486
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-C12

<400> 3959

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gtcaaacgag ggaataggaa ttgtgagtgg atgttggaaat atacagaagc ttatgtgcc 120
atcgccattt tcgtacatgg aaagccttac cctcatgagc acttgcaca actgtggaaa 180
ctggtattac tcaatcaatt ccatgatact ttaccaggaa gtatgtccg tcaagtatat 240
caagatgcaa gtagacacca caccaagggtg tgcagagaat tgaaagatataatgaaggaa 300
acattccaac tggatgttggaa aaaacatgcc acgacgaaacc aacaaggcgt caagtgcagt 360
tggatatcg aagactctag tacgagtgcg gctatgtcc attcttctta tcaacttgc 420
atatgcaatg atccatttcc agatgagcag atatcctatc agacaacttt tgatggcaaa 480
tatatg 486

<210> 3960
<211> 317
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-C5

<400> 3960

cgggtcgcc cacgcgtcag cggaagcgtg ggtgcgttgt gatcgagatg tcaacggagc 60
tcgcaatata ttgttgcgtc ttgttgcgtc ttgttgcgtc ttgttgcgtc ttgttgcgtc 120
aaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa aaagggagaa aaagaaaaag 180
aatcaaaaaca tatgttaaga ataaatgtaa tttaaaaccc attcgaatag atcaccaaaa 240
ttaaattaaa gggaggtcga taaaaaaggt acttaagagg aaaaacactg ctctaagaca 300
atttaaaccc attgtaa 317

<210> 3961

<211> 318

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-013-Q1-E1-C6

<400> 3961

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agagcttaggc aaacaagctt ttgcacgata cggaaattctt ttacgagctt cctctgtat 120
cttactactt cagctgacaa aactgccatg ataaagccag aaagacaaag gaagcctcna 180
caaaccatat cagttcccaa aaggtgctaa gacccctga ccaaacagca taaatcaggt 240
gttaaagtta atcataaccc cttcaatgca ggttctcaaa agcgaacatt gaacctttaa 300
aattcgccaa agaccaag 318

<210> 3962

<211> 475

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-C7

<400> 3962

ccgggtcgcc ccacgcgtcc gcggaaagcgt gggttcaagc aaactacttg ctgttaccaa 60
ccaattgcgc aattcttgcgc aattcttgcgc aattcttgcgc aattcttgcgc 120
tttagatgtc accaacgtgc aactagcctg gtgaatagaa caagtgcctt gtcacatctt 180
tcactctggt ggcaaataca gaaggtctgg acgagtcacc atcttctcag aatttttga 240

agcatcttc ctttggagag aatatcgctc cgagtttgt gtgttagaaag agcgttcaa 300
ctcagaacaa ctctccctcg agagttgtga cgccacaacg gacgataagc ttgtctaata 360
cagactaggg ctttgaaa aattcgacca gtttggtaaa aatgtctt tcgtgagctc 420
tttttcaag tctatgtgga agagaaacag gcaacactat atttcaaaga tgacc 475

<210> 3963

<211> 406

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-C8

<400> 3963

cgggtcgacc acgcgtccgc ccaagcgtcc gagatattat cgtctgctct tctgtctatt 60
ctgttgctta atcattttac ttattgctat tctcggtccc attggagtgg cagtcattcg 120
tccaaataat ggaggataat caatatatgc gtgcgtgtgt ttttcgttg ttgtaaatgg 180
aaatatttcc tatcgatatac aaaggaatct tgtgaaatag aaacagagaa tagggaaagt 240
cgtcacaagg accattcgta gtaattgaa taaatgtgt ggtactcaaa tgtaaaaaaaa 300
aaaaaaaaaaa aaaaaagaaa aaaaaaaaaa aaaaaaaaaa caaaaaacat aaaaaaaaaa 360
aaacaaaggc atagggaaaa aactcaacga atttggcca aatgt 406

<210> 3964

<211> 439

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-C9

<400> 3964

ccggtaga attaccgggc cgacgcacgc gtccgatttt actgtttcgt ttactgtct 60
ttttgttgag ttatcatggc acgaacaaaa caaacagcac gcaagtctac cggtggtaag 120
gcacctcgaa agcagttggc aaccaaggca gcaagaaaaat ccgcacccgt aactggagga 180
gtgaagaagc cccatcgta ccgtccggc actgtcgccc tgagagaaat tcgcaagtac 240
cagaagagca ctgaacttct tatccgaaag ttgccttcc aaaggttggt tcgtgaaatt 300
gctcaagact ttaagacgga cctacgttcc caaacttcgg cggtgactgc ccttcaagaa 360

gcctcggaaag catacttggt cggtttgttt gaagaataca atcttgcgc aattcatgcc 420

aagcgtgtaa ctatcatgc 439

<210> 3965

<211> 282

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-D12

<400> 3965

gccgaggcac gcgtcagccc acacgtccgg tacattcaac atcatcaaat gccaaaggga 60

ggaaagaaaag attcttcaaa gaaagaagcc acaagtaaac ctgcagcagc agatgctaca 120

aagacgacag aaaagtctgg tccggaagcc aagttgaagg gaactggtgc aaagaaaacaa 180

taaaaaagttt actatgcattt ttccctgttat gttttgttag ttctgtttga tagtttccag 240

ctattttttt ggtagtgaat aaagagaaaa ttttttatat tt 282

<210> 3966

<211> 461

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-D2

<400> 3966

cacgcgtccg cccacacgtc cgaggtccta acggtaagga tccaaaggta gcgaagtaaa 60

tagacgtttt aaaggcggtcc agtatgaaag gagaaacgag tgttagcactg tctagtcgtc 120

caactcagcg aaacagcaat aactgtgaaa atgcagtaaa ctagcagtag gacggaaaga 180

ccccataatt ctgtactaga tagtttagg gaggagagag aatcatgaag tagaggaggt 240

ggggtaagag atgaaagacc actgcattgag gataaggaat ctaactgagt aaggaaaata 300

agcttaagct agtttggctg gggaaataaa gcctaagaaa gagtaaatta ggcaagcaaa 360

ggcatgagag aagtataata gcagaagcat gcttgaagaa aaagaaaagag atttcagaaa 420

ggaaagaaaa gtcagctata gagaacatgt taaggagaac t 461

<210> 3967

<211> 470

<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-D3

<400> 3967

acgcgtccgg gaagatgagt gattttgtca tttgtgatat aaagagaaaa gattgcctac 60
tcaaataaggaa ctgtgttaaa agtactagac aactcaggac caaaaacagc 120
aagatgtata ggaattcttg gaccaccaa aaagttgct actgtcggtg acaagattgt 180
agttactgca gagggaaaag tttaccacgg aatcgctgcc tggtgttaagg tggaaaagaa 240
gagaccggac ggttcctttg taagaatcga ccagaacgga gtcattctag tagattcaag 300
tggaaagcca gtgggaaaca gagtatttg tggttgagc agtagagtga agcaaccgga 360
aattctctcc ttgggacgacg tcaaaaccat gtaagcttta atagtttagt gttagaaacta 420
gtaaaaactt ggcttgtaac caacgacgag tcatcgaaaa gtcatcgaaaa 470

<210> 3968
<211> 473
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-D5

<400> 3968

cgggtcggcc cacgcgtccg cccaaacgac cgccccacgac tccgcccacg cgtccgcccc 60
cgcgtccgccc cacgcgtccg cgcaaaaggca gttggggcgt gccatgtcga gttttcaagc 120
gctggactg aaggaatgga tcgttggaaac ttgcaaggca ctgaatatttta agaaaccaac 180
tccttgcac gtagcttgta ttccagaaac actaaaaggc aaggacataa tcggtttttc 240
agaaacacgaa accggtaaaa cttgtcttt tggttgccc attgtcgacc ggctaagtgt 300
ggacccttgc ggtatTTTG ctctcggtt aacgccaaca agagaattgg cttatcaaatt 360
atatgatcag ttcaaagcta tcggaggccc tatatccatt agagtagctg tggtgattgg 420
tggtatggag ttgatacaac aagcaaagga attggaaaat agaccgcata ttg 473

<210> 3969
<211> 475
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-D6

<400> 3969

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aaaaaaaaaaaaaaa aaaaaaaaaaaaaaaa aaaaaaaaaaaaaaaa aaaaaaaaaaaaaaaa aaaaaaaggga 120
ggacgccccaa agggttcaaa aacttaatta cacttaaata aaaaataaaaa agggcgttca 180
gcccttcac ctaaattcat ttcattggcc ttcgtttaa aacttcgccc ttggaaaaac 240
cccgaattta cccaaacttaa gcccttgta taaaaccccccc ttttcgcaaa aagccttaat 300
ttcaaaaagg ttttcccctt tggcccttcc cccctttcc ccaccctgaa tggcaaatgg 360
gaccccccga gtttggccc attaaacatt gtggttcctg gtggttaccc acagcgtccc 420
ccctaaattt gcaatttccc tagggcggtt tctttcgat tccccccatt ccttt 475

<210> 3970

<211> 414

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-013-Q1-E1-D7

<400> 3970

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gctaaagtgt tttagcagct gctgaaaaag aaagattatg cttaacttctt ctggagtggc 120
accatcacta taatttgtaa actatagcat tcaataagca aacgacatga acgataaaacg 180
aataatatta cctccacaaa aacacttctc gcaccggat ctttggaaagg tttctgcaac 240
attttacta gagaatccgt tacccgactt ttatcatagt aagcttggc tagtattcga 300
cgaataacgg tttctttgt caactgctga aagaatattg tactaaaaaa ttggattcgt 360
aatagtcctg caataaaaga agccaacact gctttcaatc nactacgctt cttc 414

<210> 3971

<211> 478

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-E10

<400> 3971

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cgtagtctt ttattggctc tcttatgcgt acgttctgct ctggctgctg aattggcacc 120
tggaaattgcg gaaaaaccgg tagagagagg atatgaggaa ccctgctgta ccgaatattg 180
ttattggaa gaaaatatgta tcaacaccca cacccacacc tacaccaacc tactattact 240
attattacgc aagaaatgca aaacaggaaa atgtcgagag aagcgtagaa aagagtatct 300
cttccgcaga aaaatctgat gcggttcgag ggtattccc cacgtactac tattatgaga 360
ctcctacata ttattactat tatgagactc cgacatatta ttactattat gagactccat 420
cccccaacccc gacaccaacg ccttattgta cctataacca aatgtgtaag agtataatg 478

<210> 3972
<211> 456
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-E12

<400> 3972

tgacggtcta gaattcacgg gccgacgcac gcgtcagcgg acgcgtggc ggacgcgtgg 60
gcggacgcgt gggtaactgc aaagcgacct tctagtgtt ttatggatgc gcttcacata 120
acgaaagata tcaattcaat cgaaggcctt tcatggatca actttgcttt tacgctattc 180
ctttgtggag tagcagcagt tgacggattt ttgggtggag ataagaccag cagctccggc 240
aaacagaata caggagcgaa caatgcttga gtttctttag aagttacaaa tagtcgtgtc 300
tatgaagttt tctgagttgc gtgagaaaag acaagtagtt gtgtctatga agttgtcgta 360
aatagttgtat gtgtgttgtt ttgtttgcc acagaaaagga tgtttcgtcc ttgggtggcgt 420
ttgcattggc caataaatga cacgattgt gtatac 456

<210> 3973
<211> 471
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-E3

<400> 3973

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gcttcattt tccttcggg aggccatt tctgggtgc ctgtaactgt agaagggtgc 120
gaaagtgttattt ccattcaagg agatattcgc tttgttcatg ttttggagaa gatgggagca 180
acagtttagtt ggacgccaca ttgcattacc gtttctcgta caaaaggcaa ggtcttggaa 240
ggaattgtatg aagactgtgt agacataacct gatgccgcga tgacttttagc agttgttagcc 300
ttattcgctg agggacatac ttgcttgaga aatatttact cttggagggt gaaggaaacg 360
gaccgacttg ctgcaatgtc caaagagctt atgaagttgg gagcagcagt tatggaaggt 420
caggattata ttgttattta tcctccgtt acagttcgaa agaatataac t 471

<210> 3974
<211> 493
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-E5

<400> 3974

acgggtccggc cattccgggt cggcccacgc gtccggccaa gcgtccgccc acgcgtccgc 60
ccacgcgtcc gtttatgacg aaacaagata ctctttcga taatatcatt gctgccgaat 120
cgagactcgt gcaacttcga acgagtaacg aactatgtat tcgacgcaca cctttggact 180
tttctcactc tttaagcaaa gaattgggtt gtgaagtatt cctcaaactt gaatcggAAC 240
aagttactgg tactttaaa gtacgcggcg ctttcaataa gctcaccgtt ctttcttcc 300
aaaacgatag ccgtcaacctt attgtcacag ctctcacagg aaatcacggc gctgcgggtgg 360
ctcacgcagc ttccatgttg aagataacctg tttgtatatt cgttccgtt aacatacaac 420
ctaccaaggt ggataagttt tcaagttatg atgtggactt ccaatatgaa ggaacagact 480
gttttagaggc gga 493

<210> 3975
<211> 460
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-E7

<400> 3975

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cggtgtggat tcaggcacaa caactctcgat atttgattca aagtatttca gagacttcaa 120
aaaatatttc caatccaagc tatgtgacat tcccaacgtg tgttccaata gttcagcatc 180
ttctgaaact atttttcg gggtggagg tgcttgctt ttttctctc ctagcgatat 240
cgcaaagttt cctactatta ccatcgagtt gtccagttt gaaatcaact tggaaccaa 300
agactatatg ttgcatgtgc ctcttagcga tattgaaagt ggcaactcga cgattccaga 360
aaaatcaagg actagttctt cggatgccta ctgcttgca attcttgact ttccaggtt 420
ggagtcttcc gaaggatata gcatgatttt gggagatacc 460

<210> 3976

<211> 454

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-E8

<400> 3976

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ataaggaagg aaggttcaag gaattagaat taaaaaaagg attaaggtaa atgaaaccag 120
gaaattattt gaaaaaaaaa ttgtaaaccg cttacctttg gcaaaaggtc caaccaatta 180
aaaaaggaac caaaaggaag gaaaagaaat taccaagtta aaacccaaac caatttgttc 240
taaggcggtc aaaccaaatt aaggctgaac aattaccgtt ggaaaaaaaaat ttggaaaaaaaa 300
tggataaagg ggtaaaaggc aatccaaacc aattgaaacc tggtaccccc caaaagcaat 360
aaaattacct tatgcaggaa agaaaaaggt aaaggaaaaa aaggaagaac cacaaggaa 420
ctataaccaa aaaggtgatt atccaaaagg aaaa 454

<210> 3977

<211> 482

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-F11

<400> 3977

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tagttcacga ttgatactgc tgtttgttt ggtctttata acgactataa ctttgtaaa 120
tgcaaaacga aactattata aagtgctggg cgtggaaaag aacgcttccg agagagaaaat 180
taagcgcgcg taccatcaac tagcaaggaa gtatcacccg gacaagaacg gcggtgacaa 240
gaaggcggaa ctgaaatttc gagaaatagc tgaagcatat gaagtcctat cagaccac 300
aaaaagagaa acgtacgact tgtatggcga agaagggttg caatatggtg ccaacagcga 360
ctttcaagct caaggcagca attcgcgctt cacagaacaa tctttcagg gcttcctt 420
tggagacttt ttcatgaacg actttttgc aagcggacga aaaggaaaca gttataagac 480
gt 482

<210> 3978
<211> 414
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-F12
<400> 3978

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agaaaggagg taaaagaaga gtaaaaggag ggaatgaagg gaagttatgg caaagacaca 120
tgccagcagc agcgtaaaa cgtgttagc aagcgttagag cagaagaact gggtgtaaag 180
gtcgagtagt agagtaagtg taaaaggaa aggaaaggat agaaagagga aaggatgaa 240
atgcagagat ctctagagaa aggcaagaaa gaaaagaaag gaagacacag taaatgatgc 300
gagaaagcat aggaagtgaa acggattagg aacccgtgta gtctatgcag taaaagaaa 360
aatgattaag aaaaaatgga gtcattccac caagggagta aacgcgcag aaag 414

<210> 3979
<211> 474
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-F5
<400> 3979

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gcattctact tagaggaagt tcgctgcgag gacgtcctt acaagtttc gataatgcct 120

tgtggtcggt ttcagtgc aa gtactgttgg agttagtatt ggcagtc ac ggtgtaa ctg 180
gagaacgaaa tgg tattt ggg tagacccgt ttaactggta ccattc agt tgttgt tagga 240
agacc cattc caaggaaa ac atattgtgga cccgggtgtgg tcttctt gag atacaaggagg 300
gattactgtt ttcaaa acccg cttgaagg tc gcgtt cgtt tttgaattt gg agtgaaa acg 360
agtggtttcc ctggctgact ggaccaccgc tttgcggcat ccgttggacc gttcggctcc 420
acaccctttg aagatgagca ct tttt gtgg gaggttggag aagagcctt g tttt 474

<210> 3980

<211> 475

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-F7

<400> 3980

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gaatggtcca acaacacctg taagaagttt ttattcgaaa gtgggacaga gcccttctgg 120
ttcggatagt gtgtatcatt ctccgtctcc aagtgtccgt acgtgcgc tt cgagaa agat 180
aggcaagg tc actat tctc ctatgtc acc agaagg tc ga agac agat gg cacg aagg ac 240
tccaatgaca cccaaaacca aagcgtata tgctttggg gaatctcctg gtggtcattc 300
gacacgaagc ggt aaggaa ac caaattacaa cgataccgg a gttt cgggaa tcgacgaaa 360
cttgcaagga gctaaaccct tatctttaa ctgtggtgct tttggtagat ataacagttt 420
agttcctatt ctaattacat ctgatggcag gcctcctt cctcctcaag aacga 475

<210> 3981

<211> 446

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-F9

<400> 3981

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gggaggttcc aaggagcaga ttgagaaa at tcgcga agtt gtcgagttgc cgtt gtt gaa 120
tccagaaa ag tttattgcgc tggatcga cccaccgaaa ggtgtttgt tgcacggacc 180

tcctggtacc ggcaagacgt tattggcacg agccgttgcc aatcgtaaccg acgcttgc 240
catcagagtt attggctcgg agttggtaca aaagtatgtc ggtgaaggag ctcgaatgg 300
gagagaactg tttcaaattgg cacgttccaa gaaagcttgc attatatttt ttgacgaaat 360
cgatgccatc ggaggtgctc gtttgatga tggcgctgga ggagataatg aagtgcac 420
tacaatgttgc gaaattgtca atcaat 446

<210> 3982
<211> 481
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-G10

<400> 3982

ccggtctaga attcacgggc cgacgcacgc gtccgccc aa ctagtagaa aatatgttgg 60
cgtttacttg tctcacagac tgtcggtt tagagacttc tcgattctcc agatgtgcca 120
aagccaatac cgtctcggtt cgacgttagt cccagtggtt acactcttgg aggagtgtt 180
cgatgaacta cagtccttat tcgataacta ccgacaaatc agaaggacat attgttcccg 240
gtacttttc aagatttgag tttcttgaag gtcgagtcac cggccaacc gtcttgaacc 300
ctagcatact tgactttaca gtgtctaattt tttcagatgc tgccttggaa gaatggagag 360
cattatccgc ttcaagttaga gcaaaagaac tggAACACAG aagaaacgtc accaaagcga 420
caatagaaag tctcaagaag actccttaccg aaaagtcaag ggctacattt cctggacaac 480
t 481

<210> 3983
<211> 448
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-G11

<400> 3983

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ccacgcgtcc gaactcacca gaaagaaagg cgtttcaaat atgcaagaaa 120
ctggatgtcg attacgttgc ggtgatattt ggtggcgt tagggtatag ttcggatgat 180

atcaacaagt ttcttatggcc tattcgaatt tctcattcggttgatccgac agtggatgaa 240
agtgcattatc ttacagccga tggtaactat cgcgttgggg aaggagcggg tccagcgttg 300
gtggagtcgt tgatgtataa gctttgttat tata gattt gagaagttca gtttgatcgc 360
gggcattcctg ctggttatga taaggttcga ggtgaagtta tagcgaaaaaa gaacttcaaa 420
ctgcgttattt ttgaagaaag cctttaca 448

<210> 3984
<211> 431
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-G12

<400> 3984

aattcacggg ccgaggcacg cgtcccccct gctgatgtat caaattccat ttgaacaagt 60
tcccgagcta gtgaaacatc gttcggtcat tgttcggtcg ggttatgcct atttgttctc 120
ggagcagttg aattcatttt tggtttcttg cttagaagt ttcttatcga aaagtttggg 180
agttgtacgt aagatggagc atcttgcga ggaacatgga caattgaagt tgctgttgg 240
aagcctaaga gagagtcagc gattatatat caatcatttt tcatcctatt catttgaggg 300
tacagaacgt gaaggaacag ggattcattt acaagatctt cctcaggcca tgttggat 360
gccactttgt atgttcggt taatgaaacg gttggagcag aatcatcatt taaaacatgg 420
cgctcggttt c 431

<210> 3985
<211> 438
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-G5

<400> 3985

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ggaatggcag aggcacaaaa ggatagacaa gaaacagaat tggataaagc ctcggagact 120  
tgtcctgtg ttaagggttg tggctactat ggaacatcgt cgaccttcaa tatgtgctct 180  
aatgctaca gagaacacca acgtcaagag caacaaggac aaatggaatc ggttggtcca 240
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caacaccaggc ttcaagaaga gtcgttagac aaagcagaag accgttgca aaatactacg 300
gaccttaaac atgttagatct ccaacaagat acgtgtgtct cagaagctat aacggggcag 360
tcggagttgc aatttggaaaga taccgctggg gcttcccttg aagcaaatacg caggacttc 420
gtttcacctt gtcaagct 438

<210> 3986
<211> 481
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-G7
<400> 3986

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aagatgagcc ttgcggaaaga gacaaccgca gtacaaataa aagtttataa atacatctcg 120
ttggaaatga taaaaacagc tactttata gcaagcaagc tctattatgc cactggaaaa 180
tcgtcagcag caaaaactcat ctacctccat tgcttattac taagtggaga ggccaagaga 240
gcgaacagct ttttcagtt acgaaacggc gaaaacattg actcgttaa caagctggat 300
agaattttt ttcttcgtag cgtcttgtct caacaagagt ggaagcaacc atccaacagt 360
gaaaaggata gcacacttga atcctttctc gccaggaaac tcgaagaccg tggaaactca 420
agagaccagc aacagggaaa ttaatccaa gtacgtttgg gcaactttcc tccaatacaa 480
a 481

<210> 3987
<211> 466
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-H10
<400> 3987

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ccacgataag tttggttgcg cagttaacac gagaagaaga agaagaggag acaggagata 120
aacaaggaca agatggcgac ctcgttcatc atcctattgc ttacagtacg cgcttccag 180
aaaagaaaaga agaaagttgg tggttattag tcgggtgaatt gggagctact ccaacacttg 240

ttgctatcaa acgtctcata gtcaaggag gtggaaaaaa gaatcaagtc aagttggaat 300
ggacggcacc gaatgaaata ggaagtcatg aatacgtttt atatctcatt tgtgattctt 360
acttggagt cgaccaagaa gaatccattt ccattcaagt agttgatcct ccttcttcta 420
cggttggtt gtgagtatcg atgagcgctt gcaaaaattt ctgatg 466

<210> 3988
<211> 473
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-H11
<400> 3988

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atcttttgtt tccacagaca tgtcgaacga caatcagtct gataagagca ctttgaaga 120
agcggaggag aagctgcaga gtgcagttca tactggaaca gagaaagttt ctcaggtgtt 180
gagcgacgac aaggaaactg tgacggagaa atacaaggaa tggacagcgc caaaaagtag 240
ccaagaagaa gcaaaaagaaa aagcacaaga agcgaaagaa gaggctaata aagctttaa 300
tgctatgaaa gaaagtgcga gtgccgttc agaggctgca tcagagaaag cagaaaaat 360
taagcaggat ttgaaggagt gaagatacac agtagtttc tcctatagtg ttttagtag 420
tatctgttagt gatatttgc tcgtgatgaa taaaacacgg gttatcgtat ttc 473

<210> 3989
<211> 409
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-H12
<400> 3989

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agaagagaag agagaatgct gggtgagta ccgaaacaag agaaggaaag taaaaggtaa 120
gaaagaggaa agtttacga cagaaggaag tagaaagaag agagttaag gcggcgtcat 180
aatagaaatc cgaaaggagt agaagaaaag agagagaaga aagaaaagaa gagaaaagcc 240
gtactgaaga ccgacacagg tactcgagga gaaaggagac ccaaattaag gtgagagaat 300

ggacgataag gaactaggca aaaggatatg gatatctgcgg tagaacatat gaaagaagca 360
gcaccgactg ttttagcaaaa acacagcact ctgcagaaaa aaaattacc 409

<210> 3990
<211> 484
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-H5

<400> 3990

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ttttgctttt catagcta atactgccact ctatacctat ctctgaagaa gcttatagtt 120
cgagccaatc atatggaaat gctggagcgt cgggttacgc cgatgtattt ccattatcaa 180
caaataattcc agagattgaa gtagggagtg ctgcctcctc tggagacggg gggagagctc 240
attcaacaga gtttgccacg tattcgcagg gctactcata tcaaactccg gagtaacttc 300
ctgaatttgt gcaaccttcg tctaataatgaa actatgaaata cgtcgcacct tatggaaatc 360
cgaggtatta ttggaaccccg gagtattatt ggaacccaga aggattatac taccgaagca 420
ctactaatga agagtggat aatccatcta gtgggacga atgggttcca acgactgatg 480
aggg 484

<210> 3991
<211> 451
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-A10

<400> 3991

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ctgggtgcgtt tgttaatcga gccgcaacct ttccctctcg ttggtatgga caggtaactg 120
gctgtttgga ctcagttcc gttgtaacttc tcatttcaact ttgtatgcca cgctgataag 180
ttgagttcgt tggctccaga actaaatcgg gtcagatcat atgttagccg ctcacctgga 240
acttcactcg aaaagatcag aactttcgt cgtctgcgac aggaactgct gaagagaagt 300
gattcttcat ctttgaaagt gattccttat gggaaatgtt gtcacgtacc gctttttgtt 360

accgcggcat cttagttag aaggctaact tttcaaagat acccggttag tgttctcta 420
ctcatggttg gggcacagtt gatgaatttt a 451

<210> 3992
<211> 409
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-A11

<400> 3992

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aagatgatgg gagcaggaat ggcaacgata ggttagcag gagtaggagc aggagtggaa 120
atagtatttg gaagtttgggt gaatgcataat gcaaggaacc cagtattgaa gcagcagtta 180
tttggataaca cgatatttagg gttgcgtta acagaggcag taggactgtt tgcattgtg 240
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agagacagaa gaggagttat gagagaaaaag atggaagtaa tagaagtgggt aagtggagta 360
ataatgaatc atatgaaaga aggaatggag aatataagga acgattaca 409

<210> 3993
<211> 450
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-A12

<400> 3993

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ccctacaccg ggtttttttt ggatctatcc ggttccgttta gaattttttt 180
gtttttttttt attgggtgca ttattttttt gacttcagct acaagaacaa caagaacaag 240
tagtgttattc atgggagggc ttccgggtt ttggggctct acaacgtggg ctttatatgtc 300
caacttcacaaac aaactcagag ggatgaaaga taacggcgtc ggtcgatatac cgatcgaaat 360
agccaccacaaatgatca aataacaatc tgccgttacaa aaaagtggac aacagcttgc 420
gtcataaaagc tgatttagtga gatccacaac 450

<210> 3994
<211> 389
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-A8

<400> 3994

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cgcgtgggtt ttcaactata agactccaag taaagaccag aaaaccagga acttcaggtt 120
tacgaaaaaa aagtggaaac attcagaaaa caacaatatt tggtaactt tgtgcagagt 180
atttcgact cgcttccaga tatccaagga aagacacttg tggtggagg tggatggaga 240
ttctacaact ccaaagcaat acgtattatt gcccgaatgg ctgctgctaa tggcggttgg 300
aagctgctga tcggaaagga tggactcttg tcgacacctg cagtgtctgc gatcatacgt 360
cacagaaaac tataatggagg aattatatt 389

<210> 3995
<211> 341
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-A9

<400> 3995

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ggcacttttc ttgtaaaaac aaaagcagtc aaagtcgtca tgcttattct ttgcattttg 180
ttgaaggaaa agatacggtt tggagtccctg ataattgggtt acaacccattt aagttgcctt 240
ttgaaccatt gtgatcctaa aaacatatcg aaaacccaaa tttctcgctc cctttgggga 300
acgtcgtcgt ctgtcggtcc caatcactgc ggactgtctt t 341

<210> 3996
<211> 423
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-B1

<400> 3996

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tggaaattgcg gaaaaatcg tagagagagg atatgaggaa ccctgctgta ccgaatattg 180
ttattggaa gaaatatgta tcacacccac acccacacacct acaccaacacct actattacta 240
ttattacgca agaaatgcaa aacagaaaaa tgtcgagaga agcgtagaaa agagtatctc 300
ttccgcagaa aaatctgatg cggttcgagg gtatccc acgtactact attatgagac 360
tcctacatat tattactatt atgagactcc gacatattat tactattatg agactccgac 420
ata 423

<210> 3997

<211> 159

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-B10

<400> 3997

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aaaaaaaaaaa taaaaggggc ggcagctcta aaggatctaa gcttaagtaa acgtgaaagg 120
gacgtcaaag cacgtcaata gtgtcaccaa aattcattt 159

<210> 3998

<211> 276

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-B11

<400> 3998

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cctatctccg caagagtaag aaggaaaga gaaaagaaaa aaaaaaaaaa aaaaaaaaaa 180
aaaagaaaaa aaaaaaaaaa agaaaaaaaaa aaaaaaaaaa agtaaataaa aaatcaaaaa 240
aaaatcaaaa gtgtcaaaaa agttcaattc aaaggg 276

<210> 3999
<211> 265
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-B8

<400> 3999

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atggaatga aaataccgccc tggaagtcaa tcaaattgata tgaaagttat taaaagtcca 180
ggtctcccgaa aataggctc tcgaggatggat gaaatcagt acgttcacat ccaagttgtt 240
gttcccacgc aactttctcc aaaac 265

<210> 4000
<211> 397
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-B9

<400> 4000

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acgcgtccgc tcaagtggat catcccacgt tggtaaagat agacttgtct caaggcagct 120
ttaaagtact ccaagactgt gacagagatt tagaatgtga tcataatacc aagtttcagt 180
tggaacttat tcagttatggt ctctttcac ctggttttg gacgagagaa aatgttctgc 240
tcttctatggat ggagctcgtg tcaggtgtat tcataaggaa cactctctac cttttctaca 300
acaaaggta agaacatttg tttgcgagtt taatgtgtt gttggagaca caagtttcac 360
tgtatgcaga cattaaaaca aactgggaga aacgaca 397

<210> 4001
<211> 405
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-014-Q1-E1-C5

<400> 4001

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aagtgaagac gaatatacg aagattccaa tccatccgtg cctataagag atggttcatt 180
tgaacaatat tatactggac actgtaatga gttgacgatc aaggaagttt cctttttgg 240
aagtgactgc aaatatgttg tcagtggtag tgatgatggc tatattttct tgtgaaatac 300
gcaaagtggc aagttgatca atgtcttggaa gggagattgt agtgtatgtga attgtattca 360
gagccatccg atagatcctt tgatggcctc ttccaggaatt gagga 405

<210> 4002
<211> 401
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-014-Q1-E1-C9

<400> 4002

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aggtaaacag ttgaaagatg gtcgtactct ctcagactac aacattcaaa aggagtctac 120
tcttcacttg gtcttacgtc tgaggggtgg aatgcagata ttctgtaaaga ctcttactgg 180
gaagaccatc actcttgaag tggagccctc agatactatt gaaaatgtca agtcgaagat 240
acaagacaag gaaggtattc ccccagacca gcaacgtttg attttgcag gtaaacagtt 300
ggaagatggc cgtaactctct cagactacaa cattcaaaag gagtctactc ttctacttgg 360
cttacgtctg angggtgaa tgcagatatt cgtaaagact c 401

<210> 4003
<211> 327
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-D1

<400> 4003

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cagttgtaca ttcaacatca tcaaattgcca aaggaggaa agaaagattc ttcaaagaaa 120

gaagccacaa gtaaaacctgc agcagcagat gctacaaga cgacagaaaa gtctggtccg 180
gaagccaagt tgaaggaaac tggtgcaaag aaacaataaa aagttgacta tgcatgtgca 240
gtcctgttat gttttgttag ttctgttgta tagttccag ctattcttt ggttgtaat 300
aaagagaaaa tttttatat ttaaaaaa 327

<210> 4004
<211> 389
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-D10

<400> 4004

| | |
|---|-----|
| aattcccggtt cgacccaagc gtccgcccac gcgtccgtgc ttgtttacct atgtcgatta | 60 |
| tagtgttttc cacaatatat ttgctgtggc tgctcaaaat agtaatccag ttcgtgttcc | 120 |
| caacgaatct tgtaaagaaa tgaatgaaga acaactcacc aacagaagaa ggtaaaccag | 180 |
| ttggaggaga cttgttattt atagtaccga aatggagtga ctatctataa cacaatcgtc | 240 |
| tgactatgat gatTTaaaaa ggcagatatt taaaagcct tgtAAAGCAA tcctatTTT | 300 |
| tTTaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaacaaa aaacaaaaaaaa accaaaaaca | 360 |
| acaacaaaaaa caaccacaaa qqqqcqaac | 389 |

<210> 4005
<211> 445
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-D11

<400> 4005

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ttttagttg ttttgtgctt tgtcaagctt gtctcagtaa tgaaaagcga cactcctagt 120
taaatacatg gcgtttaat ccatataagt atagttcaag tcatttcac tagtacgcgg 180
aacaagtagt cgatagttt ctacttgatt ttccagttag aagtttgcaa aggaaaaggc 240
aaaagaggta ggcagttta atactggaa gtgacacatg tacaagttag acctttgacg 300
aaaacatttc actgtttqag aaaacaacct aggtgactgc tttccatcta cccaaactttg 360

caacgaatac ttttgcttca ttgcttccac ggcagagtta caacccttcc caactttccg 420
ctaaaagtca aaagagttta ttcgaa 445

<210> 4006
<211> 385
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-D12

<400> 4006

acccaaggcgt cagatattgc agttggatt agtggagcta ttcagcattt ggcaggaatg 60
aaagatagca aagtgttgc agaatcaac aaagatcctg acgcacctat tttcaggtt 120
gcggattatg gtcttagtggc agatctttt gaagctgttc ctgaaatgac caagttatta 180
gatcaagatg gaaagacaggc tgtccattct taggtgacat ttcattttgt tcgataacaac 240
ttaaagataa atatgacttc cttgaaaaaa aaaaaaaaaa agtaaaaaagt gaggacaga 300
caaaacagat aaaagattac aaccaaatac aagtcagcgg cgaacacttt aaaaaacata 360
aaaaaaaaagg ggcggccgccc caaaa 385

<210> 4007
<211> 471
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-D5

<400> 4007

ggtcgggatt ccgggtcgac cacgcgtccg cgaaagcgtg ggtaagcgtg cagaagaact 60
ccgagaaaatg ttttctgatg tgaatatcag aatatggct tggaaaggct taatggatgt 120
ggtaagcacc tcagaagcga tctttacttg cacgagctcg tcggaacctt ttctatgtgc 180
ggataattta cgaggtactt tggcagattc ttcaggaaca cttgtcggtt atatatctgt 240
tcctcgaaat gttgcctcgatgtgaagga ggttccatat gtctattcct acaatgtgga 300
tgacttgaaa gcggtagtgg ctcagaatca gtcacgtcgt cgcaagctag ttcaagaagc 360
agaaagtttgc ttgagtgaag aattgcattt cttttgtat tggcatcatt ctcttggagc 420
tgttcctgct atcactcgat tacaagagcg agcagaaagt attcgatcg a 471

<210> 4008
<211> 439
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-014-Q1-E1-D9

<400> 4008

atccccgggc cgacccaagc gtcagctcg acgtcggtga ctgaccgttc tgttggcata 60
ggtacaacag agcaactcaag agacgtgaag caagtaaaag tcgttcgaac ataaaaatggt 120
tcagttattt gtaaaaaggc ttcatagcaa gactcttcg tttgatttc ccgcggatac 180
ctccatatgg caactacgaa agcaacttgc ggaagttgaa ggcgttcctc tagcagctt 240
aagaatttgtt tctagtgtta ctgatttagg ggatgagaag agtataaggag atctcgatag 300
tcagtttttg tttactagct tgagacttat gggaaatgcg anngagaaga gaaaaagtct 360
tttacgaaac cgaagaagat caagcataag aagaaaaggg tgcacttgca gtgctgaagt 420
tatataaaagt ctcggacga 439

<210> 4009
<211> 473
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-E1

<400> 4009

gggtcgggcc acgcgtccgc ccacgcgtcc ggtttggaaag gcgtccagta tgaaaggaga 60
aacgagtgtta gcactgtcta gtcgtccaaac tcagcgaaac agcaataact gtgaaaatgc 120
agtaaaactag cagtaggacg gaaagacccc ataattcttg actagatagg ttttagggagg 180
agagagaatc atgaagttaga ggaggtgggg taagagatga aagaccactg catgaggata 240
aggaatctaa ctgagtaagg aaaataagct taagcttagtt tggctgggaa agtaaagcct 300
aagaaaaggt aaattaggca agcaaaggca tgagagaagt ataatagcag aagcatgct 360
gaagaaaaag aaagagattt cagaaaggga agaaaaagtca gctatagaga acaggtgaag 420
gagaactcaa aaagaggaga gcaccgaacg atcgaagaag aaactttggg ggt 473

<210> .. 4010
<211> 350
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-E10

<400> 4010

ccgggcccac ccaagcgtca ggaaatattg gagtcaaagt aatttgtgga cctggaaactc 60
gcattccaga tgcagctatg caagtattga aagccattga agaagaacca accaacggtg 120
caagtaatgg tgtggaacaa acatcgtagt agaaattata agaaaattat ttcgttataa 180
caaaataaaaa acatttcaa gaataaaatt aacaccttg agttcaccaa gctcccaaaa 240
aataacgttc tgccaaaaaaaaaacggcggc cccccaaaag gtttcagcct cacttaccct 300
taaaggaaaa ttcaaacctc ttcaaaagtc cccccaaaat aaattccacg 350

<210> 4011
<211> 150
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-E11

<400> 4011

aattcccggt ctgaccacg cgtcaggtgc ttgcatcat acaacaacac aaattattta 60
aaaaagagat tcctccagct aatcctgttg ctggacatgc agaaaaaaaca ctattgtaaa 120
taacttgtat tgcgtatga tqcaaagcac 150

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<210>      4012
<211>      321
<212>      DNA
<213>      Cyanidium caldarium

<223>      Clone ID: LIB190-014-Q1-E1-E8

<400>      4012

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aaggagaaaac gagtgtatca ctgtctagtc gtccaaactca gcgaaacagc aataactgtg 120
aaaatgcagt aaactaacag taggacggaa agaccccata attcttgact agataagtt 180
aqqqaagaga gagaatcatg aagtatagga ggtggggtaa gagatgaaag accactgcat 240
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gacgataagg aatctaactg agttaggaaa ataagcttaa gctactttgg ctggggaaagt 300
aaagcctaag aaagagtaaa t 321

<210> 4013
<211> 430
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-F10

<400> 4013

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gcccatgtac agtagcagag aaaggtatcc atattatgac ggtgaagtat atgatgacac 120
gggtgttgc cccccggaaa caaggccaa aggaagacgt gtcatacgat aagagccaga 180
agagtacgga atgcccgcag gggacagaga tgatagcgaa gatgacgagc acattggtgg 240
ttggagaaga agagaacagc acagcatgca gccttggAAC cagtcacctt ttgaacattt 300
tgacagactt ttcgaaaatc cttttctgc aatggagaga ggatgattcg gtggattatt 360
tggtaacttg ggacagtccct taagaagact ggaggacgac tttgcAAAAA gtgggggaaa 420
tggaaagtgt 430

<210> 4014
<211> 429
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-F11

<400> 4014

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aaactgcata catattctaa caacccaaAGA gctcaAAAAG cactgattgc ggccgaatat 120
gCGcaagtgt cagttgaagt tccaccctt gagatggta aggataacaa gactccagag 180
tttcttaAGC tattttccctt gggAAAGGta agctatgtt gattctctat tggactgtgc 240
ccttatttgg aagtaggttc cagcttggA aactccccAG ggaccttattt cagaaAGTCC 300
tgcaatAGCC tggtatTTG caaaattgcG ccaagataAG ggtctctgtG gaagtacctt 360
ttatgaagAG tgcatagtac aacagtggat ttctttgca gaagatgctt ttacgaaaca 420

ttatccagt

429

<210> 4015
<211> 382
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-F12

<400> 4015

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cgacgaaatt ttatgaatat gaaaccaaga aacttcctga tcgttagatga acacaatgct 120
ctttggcaga aatttggtag tgacactaaa acgtggttac ctttcttga gttttatgca 180
gatccagtag gacatgctgc cgtaagtaca tgcgttccct tcctttgat cattaactgg 240
ggatagtgg attgtaaatt tgttatcgca acttcgcagc ttcacgagtt caagctgccg 300
agtggatata gaaattctaa gaggtatgtg gaaccattga gccgagaaga atttgaatc 360
agatattccg ggataatgaa ag 382

<210> 4016
<211> 474
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-014-Q1-E1-F3

<400> 4016

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cttcaaggca atactgcgcc gtatgttg tatgcttttcaagaataca aggaatata 120
cgtaaaggag atatagactt gaaccaaggt catcaagcag aaaacgtaca attcattctg 180
gacgatccga cggactgtc gcttgcggaa atgttgttc aattggaa aatgttattt 240
ttactagaaa gggacttgaa acctaataatt ttatgcact acatgttcga actaagtcaa 300
cgctttaacc aattttatga gaattgtccg gtactcaagg cagaaacggg ggacctttaga 360
acttctcgac ttgccttgcg cttactgact gcgaacacac tcgcactgtg tttacattt 420
cttggaaattc ctactttaga aagaatataa aaatatatgg agaagcaacc aana 474

<210> 4017
<211> 380
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-014-Q1-E1-F4

<400> 4017

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aggagggaaac cttcctttt aagctggatt tgcccatcgt tactggttcg gcgttttag 120
gctttgttct tttggttatg agttcacct gtatgaatat tactattcca ccttacaaca 180
gtccacagat catcaagatt tggcagttt tcataagcat tttgggcttt ttgttgcttt 240
tatccttttc ttccatgttt tactggatgc gaaaaaatgc tcctcgaacg gacttatana 300
tgccttacca tggagctttt cgcggtgtta tgaactttga aaaataaatt tgggttgctt 360
ccatttanta caattgccac 380

<210> 4018
<211> 369
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-F7

<400> 4018

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agagggaaagc gttaaagcat gaaagaaaag aaatccgaaa aagaagagaa aaaggaaaga 120
aagatcaagg aagtaagagt aagagaagga gtaatgtgaa tgaaagcagg aaagtattt 180
aagaagagag tgtaaagcgc gtacctttt cataatgtcc cagcgagtga aagaggaagc 240
aaaaagaaaag aaaaagaagt agccaggtaa gaaccgaagc tagttgatct tatgctgtcc 300
aagcgaagta aggctgaacc agtatctgtg gaaaaagatt tggaaagagaa tggataaggg 360
gtgaaaaggc 369

<210> 4019
<211> 504
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-G1

<400> 4019

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cacgcgtccg cccacgcgtc cgagattgc aagaagataa tattttgaat agagcactat 120
cacaaccagg agatgtattt ctgtgctttt gcaacatcca gttgttggtg aatgcagaaa 180
gagctattat aggaaatatt acttgtccag aaagtatcga attgtgtcgt ctattagctg 240
gacatatagc ggtttgggttc gatgaacatt tggatgactt tcgtttggaa gctatcttgg 300
gagcactatt gtgtacttgtt tattgtgagt ggaagcggtt tgaaggagaa ttgggggtac 360
aagaatggaa tgaattggag aagatatctt ccttagatac ttggaagctt gtgcttggta 420
caagacaaag agtggataat atgttacagc gactacacaa gctgacgagc atcttgcct 480
ttttatactc gggcgaacaa ccga 504

<210> 4020

<211> 434

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-G10

<400> 4020

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taccaagctt tttatacagg aaattctaaa ggacgtttac aacgcagata atacttggaa 120
tgccgtggtc ctgcgttatt tctaaccctg ttggcaca ccccaatggc ctcatcgag 180
aagatcccaa cggatttcca aacaacttga tgccttaaat tgcgcaagtt gctgtatgga 240
cgtctaccccg aacttagcgt ctggaaat gactatgaga cgcatgacag aactggagtt 300
cgagactata ttcacgtcgt cgatctagcc aaggacatg ttgctgtct taacaagatg 360
gagaagcatg ccacacgttg ggtgcagtt aatttggaa ctggcaaagg ctattctgt 420
ttggaaatgg taaa 434

<210> 4021

<211> 488

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-G3

<400> 4021

gtccggctat tccgggtcga gccacgcgtc cggccacgca tccgggttcc tactactgt 60
tttcttgctc tgcccagtgt tgtaaccgaa acaagtaaat ttgaaggcatg gttacgatct 120
tcgcgtcttt tgaataacttt tacagttgga ccgcaagcaa gtgaaagtag tctttgctc 180
ttgaagtgtc acgctcttgt ttggggacg tcaggaccat tattgtgaca ctccctctt 240
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atatatatat atatatatat atatatatat atgtggaaac ttgcgtcacg gaagatacca 360
agttttgaag tgggtttac tttcgacaa acgaaaggca atcatagcag ctagttgct 420
tttgccttag tacatgagtc gttgcaaagg caacttttt taaaaaaaaat atagactgt 480
ccagcgag 488

<210> 4022

<211> 462

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-G6

<400> 4022

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ataaaagtact ttttatgaag aaaggaggga aaaaacttagc gcaaactgaa gctctttac 120
tgaagacttg gaatttcaa aaacgtcaac acggtaaaa tgcttgtaat attcttgac 180
caatagtgtct tcttgaaaa acattgttc tggaaaaat actcagtgtct ggttagtaggg 240
tacctgtgaa ggcaagtaga gcaaattcta taggcgttt tgctccgttg cctttgatc 300
cttacgactg tcatcgagct tatagcgacc cagaactatg tctcaaggac cctttgcac 360
cgaggcctat tatattcca tattggtccg tgaatgagac agcaacgggg tttgtcaagt 420
acaacccttg taaccctctc aagaacgaaa cacagtgttt gc 462

<210> 4023

<211> 381

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-G9

<400> 4023

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tagcgaaaca agagaaggga agtaaaaggt aagaaagagg aaaggttac gagagaagga 120
agtataaaga agagagtgt aaggcgctc ataataaaaa tccgaaagga gtagaagaaa 180
agagagagaa gaaagaaaag aagagaaaag ccgtactgaa gaccgacaca ggtactcgag 240
gagaaaggag acccaaatta aggtgagaga atggacgata aggaactagg caaaaggata 300
tggtatctgc ggtagaacat atgaaagaag cagcaccgac tgtagcaaa acacacagca 360
ctctgcacaa aagagaaaat g 381

<210> 4024

<211> 422

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-H3

<400> 4024

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gttttgtgct gtccaggaa tatttccttag taatcgatca tggcacagag caagacttta 120
gctcactttg aacctgtgaa tctatacgag tttgaagctt tggcaaagtt gaagctacca 180
aaaatggttt atgactatta cagttcagga gcagacgatc aatatacact tgcagataat 240
attgaagctt taaaaagact tcgttggtt cccagagttat tggtgatat atctgccaa 300
gatatttcta ccactatatt ggggtttct tccagtttc cactggcat tgcacctact 360
gctatgcaac gaatgggaca tcccgatggc gagtgtaaaat ctgcaagagc agcagccaag 420
aa 422

<210> 4025

<211> 97

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-H9

<400> 4025

ttttcttct tttactgcat agactacacg ggttccta at ccgttcact tcctatgctt 60
tctcgccca tttactgtgt ctgtttctt atttgcc 97

<210> 4026
<211> 57
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-015-Q1-E1-A3

<400> 4026

ttacatacgc gtgtatgcga cgtcatacat catcggacc gtcancattaa ttcaaaa 57

<210> 4027
<211> 405
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-B11

<400> 4027

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aaaagcgaaa tgtagtgtga actgcaagtt ttcgtgaatc attgaatctt tgaacgcaag 120
ttgcgccttg aggagaattt atttcctgg aagcacgtct gtgggagtgg atgagaattg 180
tcttttcca atagaggaag aggataataa catgtttata gagctttca gggttggca 240
ttcgtcgccct aacgataatt cttagtggtag cataagagaa gataatttga tacattttag 300
gaatagttaga gaagagaaga actttttttt cttgcttagat gataatatct atatatacat 360
atataatcata caatatgtat ttgtacgata aagaattttt ctccc 405

<210> 4028
<211> 320
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-015-Q1-E1-B9

<400> 4028

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gtcgtgacaa gttataatat aaaatggcca aagtaaaccc tgtgtcgctg gtcctaaac 120
tgggtgtaac tagagagata cctatcgta ttgggcgtgg tatancgtgt gctatggtat 180
ttcgccagtg gcatctcgga tacacggaaa tgataagaaa atattatcgc gagttggatg 240
aacaagaaca gagttcctcg tcgtcgtaa aaccgccttg tgtttgtag atagcaataa 300
agtggactct tgttttttt 320

<210> 4029
<211> 112
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-E12

<400> 4029

cgcgtccaac caaacctcca ctccacacgt ccgcccactc aaaaaaccac gcctcccggtt 60
tctgtggcca attatcagaa tacctttttt caacgaacaa cgacaacacc aa 112

<210> 4030
<211> 420
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-E5

<400> 4030

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tgaaacggat taggaaacccg tggtagtctat gcagtaaaag aaagaatgag taagaaaaaa 120
gggagtcggt ccaggagggg agtaaaggcg caagaaaggg acccaggggca attgacggga 180
atcggaaaaaa ggggtggatc acgttaaatta atccgatata aaccgagaac cttacctctc 240
caagaaggtg ttgcacggct gtcgaaagaa cctgctgtga agtgagagaa cgtacgacaa 300
agccaaagtga ggaaaagaag gcaagtattt ttttgcggca gaaaggagag ggcgtaaagac 360
gtgatacaca gtacgaagaa cagagaagag agctacaaag gacgtaaaac aacagtaaaa 420

<210> 4031
<211> 373
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-F10

<400> 4031

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cgagcacaag cttgtgctgc tgtgatgttg ggacaaggaa agacagtatg gcaaggcag 120
ggggatgcgg cagtagaaac catcgattt gggagatgg tttcaagtt tgcaaggaa 180
atttacaacg tgcaaccgcc tgaaaacgta aaaggagttt ggaacacaac agaacataca 240
ccgttggaaag gttttgttgc tgctattact ccttttaact ttgtggctat tgctgccaat 300
ctgccttctt ctctttttt tatggaaat gtggtttat ggaaacctac ggaaagtgc 360
atgttgggtg cct 373

<210> 4032

<211> 358

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-015-Q1-E1-H9

<400> 4032

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ggacgcgtgg gcggacgcgt gggcgacgc gtggcgacg tcaccttggg gattaccaag 120
tcctctcctt ttcccccccc tgcactttat ggaagcacct gtttaggcgg atgaanggg 180
gtcaaaggc aacgtggagc tagaaaaagg tatactgaca gacacgagtt ggaacttgcc 240
cttgtttca acggaaagac ctgtttctac ttccacagtc tcggacggta gtttggaaagg 300
cagtgaagct cagcctgaaa gttcacattc ttttctact attagaacga agcaacaa 358

<210> 4033

<211> 269

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-A10

<400> 4033

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gagtaaagcc aacaagagca gagggaatga tgtataaagc agggccagta gtaacatggg 120
ggtggtcgat gctaggatgg agttagtac cggggaggag aacgaaaggt aatagtggat 180
atagaagtgg gaataatagc atggatgagt ataggatcat tgggagtata tggagtagat 240
gaggaaagaa agatcaagga agtaagact 269

<210> 4034
<211> 389
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-A12
<400> 4034

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ttgggtggat tggctgtcg tagagcttgt tatggcgtcc tacgatttgt gatggaaagc 120
ggtgccaaag gctgcgtcgt cactgtaaat ggggggttga gagctcagag agccaaaacg 180
atgaagtttgcgatggata tatggtcac tcgggacaac cagtcaagga ctatgttagac 240
actgcagtgc gccacgtact tatgcgtcaa ggagtgctag gtatcaaagt taccatcatg 300
ttgccgtatg acccattttt ttttaaaggt cttccacaa cactgcctga ttatgtgcaa 360
atttaccaat caaatgaata caaagtcc 389

<210> 4035
<211> 71
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-016-Q1-E1-A3
<400> 4035

tagaggatca aggccggggt acgggtgcata gagacgtagt agctcgggga gantggggcc 60
taaattcaat t 71

<210> 4036
<211> 270
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-A5

<400> 4036

cgtcaacccg aagcttagttg atcttatgca gtccaagcaa agtaaggctg aaccagtatc 60
tgtggaaaaa gatttggaaag agatggcata aggggtgaaa ggccatgcga agcttagggat 120
agccggtacc gctcgaaggc gatataggta gcgtatgcag gaaagaagaa ggtaaaggaa 180
gagaaggaac aagcagagag ggactatgag cgagaaggtg gatagtcgag agggaaaaag 240
cccagaagcc aagataaggt atcaaagtaa 270

<210> 4037

<211> 193

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-B10

<400> 4037

ccacgcgtac caagcatggc tttggcaaca tagggacaac taaaaacagt ccttattcgc 60
atgaaacctc cagtatctca cgtggcttgc acacatgtat ggcttggaca acgttgtcaa 120
gggggtacgt gcgagtcatc acgatcgctg ccgggggggt tacattgcca ttcctgcaca 180
aatttccaaa tgt 193

<210> 4038

<211> 458

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-C11

<400> 4038

gaccacacgacg accacggacg cgtccgcccc cacacgacaa agtacggta 60
gaacagcctg tgtatgaggt tgaaaagaag accgcagaat atgagataag aaagtacccc 120
aggtggggaa tagctgaagt tcatcggtca gacgggaggg aaagaagaat ggctcggcat 180
acgactttga gtcgcaagca ttccgagtgt tggcgctcgta cattgggtgtt tttggagaac 240
ccaaaaacaa acatagctcc aacacgcattt ttaagatagc aatgacagca cctgttttat 300
cacagccat agggtccgtg tttttttta atggacgaca gcagtcgtac gtttatattt 360
cccaaggagt atgcacagca acaagaacct ccacagccat tagacccacg agttcacttg 420

cgtattgtac ctgtcacaaa aatttcagcg actacttt 458

<210> 4039
<211> 207
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-016-Q1-E1-D1

<400> 4039

cagggaaaggt tcatTTggc gttatatatg gtccggcaat cgtacgaggt ctttggattt 60
atgcgatcgt aaacctgagg anttggAAC gttggactt atacacaact gtgagtattt 120
tagggtaCTC tttAGTTCCA atcgtcatat tgTCgttctt gctgtgggt ttgtttctta 180
agaagTCgtc cttgttacct tttattt 207

<210> 4040
<211> 379
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-F11

<400> 4040

gttgcCacta tattgctca aagaggact gagaatatga tggacgatgt tgaacgtgct 60
attgacgatg ctgttaacgt atttaaagtg ttgacggggg ataataggTT tcttcctgga 120
gctggagggg gagagcttga gttggccgt cagatctctt cgTTTggaga gaagagccct 180
ggTcttgatc agtatGCCat aaagaaaatgc acatgttttacaaggTTtgc tcccacgacg 240
ttggctgaaa atgctggct caaggcaacg gatgtggTTa gtcctcttta tttctttat 300
acgtcaggac acagcacaaac tggTattgtat attgaagctg gaagtaaacat gcacgaagac 360
gttgcTggTg tatccttg 379

<210> 4041
<211> 257
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-F5

<400> 4041

aatattttca attggatgag gatccctcggttgccgaatctgaatttcgtttggtcacga 60
atgctgttgg gggggcaggg aaacttaggg aaacgaacat tggggacacg ggtttacaaa 120
ccttgtccca gttgttgaag aatgtccact cgtcaactta tcaagtccat ttctacaaga 180
catatttcca gttgatatttgcgtggtacc ctacagatac tttgccaccg 240
cctgtgcgta aatatca 257

<210> 4042
<211> 366
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-016-Q1-E1-G12
<400> 4042

acccacgcat ccagcgaacc tatccaaaca tagtagacaa taataagaaa ccattctagt 60
atattttaaa gcaagatgat accttatca aaggattcca acgtccagta aagagacgac 120
ggggctgcac aaatgtcatc atcatcttga gagggcggtc aatcttgtcc aaagagagat 180
tggatggccat ccaacaccac aaaggcagcat ttcccaggat agaaacatcg tggaaacaga 240
atggattgaa gtcgcgtctc tgtttatgat agaaatcata tactgtccgt tttatgttgc 300
caaaaataca aacatttatt ctcccttagt ttgtaaatat atgcaatcag gaggatattc 360
ggactc 366

<210> 4043
<211> 430
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-016-Q1-E1-G9
<400> 4043

aattcgccgt tcgacccacg caaccagtcg gcgtgcgatt tgtagaccat ccgcacttac 60
tatgggttgt tcttttgcgttgc ggttattcat attctgaaga gcattttcg catatacgaa 120
aaactttct atgggggtt tttatatgat tcctaattca atggggaggg gaaagaatgc 180
tgaagagccg gttccacgtg gaaccaaagg cggtttgtatctgccttga aaacttagtac 240

tttgctcttc aaatatagct gtacaatgtc gccaaattta acttgtacaa tataactcaaa 300
aaaacaaaca aaatccaagt tcgtaataat ctcttattt tactcaaggg gccagaaatt 360
gatcaacaaa acatgttcaa ttatccctta acactacata tcaaccagtt gctgatattc 420
aagaattttc 430

<210> 4044
<211> 122
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-A1
<400> 4044

tccgggtgac ccacgcgtcc gctatcggt cctctcactc atctgccac gacgtccaaa 60
aaaggttca caaaactcaa taccacatt tcaggctgct acaccgtaa aacccttta 120
cc 122

<210> 4045
<211> 325
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-A9
<400> 4045

gacgcacgac tcaacccaca agtccgcatt tacgctcatt gcaaatgtgt atgcccgaga 60
gattctaaat tcgacatgaa atccgatagt tgaagttcat gtcactacag atctaagtgt 120
gactcggaca actgttcctt ctagtgcgtc aacaggaggt tacgaagctc acaagtttag 180
agataacgac aaatccaggt atcaaggaaa cgagttaca actgcaatac agtctgtcaa 240
taccgaacctt gcaatacacctg tgattggtaa ggattgtcga gatcagacac cgattgatcg 300
aatgatgatc tctttggatg gaatt 325

<210> 4046
<211> 339
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-C10

<400> 4046
gcgtcagctt atatggagtc acttattcgc agcgaaaaac aacaaataga aaagcaaaaa 60
gaaaagaaac aaatgaagga agaaagagag ttccttatgg ataaaatatt tacactgcag 120
ggtggaccaa gatcctctcc accaggagag gaggtcacaa agccaagaaa aagagacaag 180
taaaaagata aaaaagttat cgaaaccaat agtaaaaaaa caaaagacaa aagacaggcg 240
aaggcgacaa aagataagga acagaatgca acaagcagtt gctatgttga gcagtttagac 300
ggaataagtt ttacggatgc aggtaccttc aactttgtt 339

<210> 4047
<211> 351
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-C11

<400> 4047

gcgtccgccc acgcgtccga caagacggtg agtcatccga agaaaactgaa aagcgtcaat 60
gccattcaat gggcaccgca ttccgcttcg catatttggtt cggctggaga tggatggtcgg 120
acgttgatata gggatgtttc tgcgattcga gggcctatcg aagaaccgat tctctttat 180
cagtcggata aggaagtgaa caattgcag tggtcggcag cagatccgga ttggatagcc 240
atagcgcacgg gtactaaaat gcaaataattg cgagtatgaa agtggtaact ttacaaagca 300
atatgtatgc attgtcgtaa tatgacgtaa tqatacataaag qcactactaa a 351

<210> 4048
<211> 351
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-D5

<400> 4048

cacgcgtcaa agaatgaaac gtcactccag tattcaaaaa gaattacctg aattagaaca 60
aaaacttgcg caaggtgcc a t a t c a c c t c g a a a a g c t g c c t t g a c t t t g t t g g a t a t c g t 120
t t g t g g a g g g c a c a t t c t c c a a c a g a c a a t t a a t c a g g g g g c g t t c c g a a c a t t c t t t t t t 180
c t c t a c t t q a a g t a t t g a g g c a a t t c a t c a t c t t g g a t g a t t a t t c t g t a c a a c a 240

ttcttgatca caattcactt gaattgtcga atgaacgata ccaaaacgct ttcgttagtat 300
ttcttgagca gttaataaaag tgtttttat ttcactcgca aaacaaaaag c 351

<210> 4049
<211> 329
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-E3

<400> 4049

gcgtccgcca gcacgtccgg gcagagaagt tgacagagat caaagaaaa gttgccata 60
aaataagtga aatgactgga aacaagtac ctcaggacca ggcgaaggat aaagctagcg 120
agggggggga ccgtatgaag gatgcagggaa gtgcgggggg ggaaagtgct caaatgcag 180
gggacgcccgt caaggataag atgtccagca tgaaggagtc ttttccaac aaagcggaaag 240
gtgtgaaaga aggtctgcaa aagtagatac tccgaggtta tctcatttgt ttcgtcctgt 300
ttgtgtttaa ataaaaattt gttttttt 329

<210> 4050
<211> 347
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-F10

<400> 4050

cgtcaaccca cacgtccgt a cagtatggc acccaaagga tccaaaagtg tacccgttgc 60
tggaaaaaaag cccattggta aagcagaaaa gaaaaaaagcc aaaaagaagc gtgcagaggc 120
ttacagtatt tatatttaca aagtgtgaa acaagtccat cctgacactg gtatatcttc 180
caaagcaatg agcatcatga attccttgtt caatgatata tttgaaagga ttgcttccga 240
gtctagcaag ctggcagcat actcaaagac aaaaactctt acttcgagag aaattcata 300
tgtttgtacg cctttgtta cctggagagt tggccaagca cgcaattt 347

<210> 4051
<211> 96
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-H11

<400> 4051

atattaattt tttaagcttt taacagtttt gtaaatatat tcacgaaaag ctgatacgcg 60
ctgattaaat atcaggaaaa tgaaaacaaa caaact 96

<210> 4052

<211> 256

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-H12

<400> 4052

catcaagcgt gagactgcag agagtggaaat cgaacaagaa caacaccatg gcgagccgat 60
ttaactttcc atttcttggtt tggattgg ccaattccca acggctcgac gtgttggggt 120
ataaatcgta gcgttcgctt cggtgggagg catgttcagt tggttgtaga tggaaatcgtc 180
catgaataat aaaccaagca ccaagccata aaaaaaaaaatt ggacataaaat aaactaaaaaa 240
tcagaccaaa ttcaac 256

<210> 4053

<211> 434

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-H8

<400> 4053

cacgcgtcaa gaataacttta tcataaaggc cgggtggtaa gatgaagttt ctcacgtacc 60
actttttaca atgtcccaaa accaaaaacct ttcccttggtt attggagcct actcaagtag 120
aagcgagaga aacagaatat aacaaggaat ttacgcgtcg catgattcct agactagatt 180
ggaacctggc tcgacaagta agtaaacagt ttgcgtttgg tgaactgcca ccagtagctc 240
cccacaacga cacaacggat gaagaaactt tacgaatgct tcacaagttt ctattggaga 300
cgcatatcaa ggaaggagtt ctcattagtc aagatggaac tatattatccg ataaaagatg 360
gcattccaaa tatgctcata acacaagtca accaagacga gtaaaagaaaa atagatattt 420
ggtttaaaac aaac 434

<210> 4054
<211> 399
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-A2

<400> 4054

tactggtcta cgaattcccg ggctgaccca cgctcagcc cacgcgtccg attgcccttg 60
tcgtctaaca aagacacacg ttaaccttgg tccattacta ctaggaatga cccttcgtaa 120
accagtctt accaaagtag agggactaca acccgggaca caggggcaca acgggatcgt 180
tcaagtatg aacgtcggtg aggttatgga aaaagtgaga ccgagttggt acaaactgca 240
aatcgccgaa gtgctacttg cagatgaaac tggagcggta ttatttacag caaggaacga 300
ccaaatcaaa cttttaaaa agggagagtg ttttaccgtt ccaaacgcaa aagtcaatat 360
gggccaggc tttattcctt tactagttga caaatgggg 399

<210> 4055
<211> 383
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-018-Q1-E1-A4

<400> 4055

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gtcgtaaaaa ctctggcac ctatgcttct cctttattcc atacttatcg ttcttcctcg 120
aacgatacga ttgctgcaga gggggacaag ataaaaact tcacaactct gtgcagtcta 180
ccccaaattt ccaatctgac tagtactttt gaaaacgctt ctcttgcagt tacgctctt 240
gcaccaacac acagcggaat ctcttcaaca ctcaaaggcag tgaatatttc ggcaagcccc 300
atatacaaaa acaccactct ggttaatatt ttttcttagt atcatgtcct acctgagcca 360
ttaaagactt ccaaattctc cgc 383

<210> 4056
<211> 374
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-B2

<400> 4056

aattccgggc cgacccacgc gtcagcccac gcgtccgaga gagagaagaa agaaaagaag 60
agaaaagccg tactgaagac cgacacaggt actcgaggag aaaggagacc caaattaagg 120
tgagagaatg ggcgataagg aactaggcaa aaggatatgg gggctgcgtt agaacatatg 180
aaagaagcag caccgactgt ttagcaaaaa cacagcactc tgcagaaaag agaaaatgta 240
aagtatagag tgtgcggcct gccaaatagt agagaagaaa tcgatgaaag tgaaagcgag 300
taaaagatga ggtatagata atggcggtcc taacggtaag gatccaaagg tagcgaagta 360
aatagacgtt tgaa 374

<210> 4057

<211> 268

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-B3

<400> 4057

acccacgcgt cagcccacgc gtccggagaa aagaaaaaca aataaaagga gtactacaag 60
gagcgaacat aatgggagca ggaatggcaa cgatacgttt accacgagta cgagcacggg 120
tggcaataat atttggaaat ttgatgaagg gggatgcaag gaacccacta ttgaaccaac 180
acttatttgg atacacgata ttaaggtttgcgttaacaca cgcagttacga ctgtttgcac 240
tcatgatcac tttttacca ctgttttc 268

<210> 4058

<211> 393

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-B4

<400> 4058

ttcccgcccc gacccacgcg tcagcgtcga ttgacagagt ccaagtctca agtaacacat 60
gaatattgtc aaattcaatg tcaactcgat aaggtattag agttgcggaa tatttgaaag 120
aaggaaaggg agtgtgtcta tttccgtaaa tgattttgtg ggtcgagcta ctgcacttgc 180

attgagacga gtaccagagt tgaatatcg^t ttggatgaa gcaaggccaaa gtggaaacg 240
aatggaacga gtcgatattt ctatggcagt tagtattgaa aatggcttga tcacaccaat 300
tataacggac gcggatattt tatgaataga agaaatttca catacagcca aagagctcat 360
tatgaaagca cgccaaggca aactgaaacc tga 393

<210> 4059
<211> 412
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-C2
<400> 4059

tactggtcta gaattccgg gccgaccac gcgtcagacc aactgttatg aggacgacga 60
ctatcgaaaa cgacctgttg ccttcaaag tatttcgtct gtcttgcacc accgcacacc 120
acaagtattc atatcgaaag ggggagttgg caccgttgca cgtattcctt cgggtcctct 180
tttgtcttagt gggaaatata gtctccgata tagacaccaa ttcatagcaa ctcctttatg 240
gtctactcgt ttcaaaactg ggaaaagaga tgagcgctac aaaagtatca agtaacgtcg 300
ggagcgttgg aagacaagac agaggatgga tgtatcgaca attctatgga cacagtcaac 360
tcagagcagt cgaaaataac gaccgaggaa gacggttcca cagagtcccc at 412

<210> 4060
<211> 390
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-C4
<400> 4060

ttcccgccc gacccacgacg tcagaccacg cgtccgccc cgcgtccgac atcgataata 60
ttctgatggc acttttcttg aataatagcg gcggtgcatg ggacaatgcc aagaagtata 120
ttgaaacagg tgcataatggt ggaaaagggtt ccgaggctcg gggggcttagt gttactggag 180
ataactgtggg tgatccttt aaagataactg catggccttc cttacatgtc ttggtaat 240
tactatccac cctcacactg gtgttggtc cgctgttctt gacttctgac ggaatagaag 300
tcatttccgg ctattttta ttaccttaca tatcttcttc gtgtctctct tttttttttt 360

tttatacgac cattaaacca tattgtttt

390

<210> 4061

<211> 362

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-D12

<400> 4061

acccacgcgt cagagaaaaga ggcaaatacg ggaaaggcagt aaaagaagaa agagaaaagga 60

aaaaaaactga gtatcaggaa gaaaagaggg agtacatgag gaaagaaaaga tcagggaaagg 120

gagagtaaga gaaggagtaa tgtaatgag agcaggaaag tatttgaaga agagagtgt 180

aagcgcgtac ctttgcata atgtcccagc gagtgaaaaga ggaagcaaaa agaaagaaaa 240

agaagtagcc aggtaaagacc cgaagctagt tgatcttatg ctgtccaagc gaagtaaggc 300

tgatccatta tctgtggaaa aagatttggaa agagatggca caaggggtga aacgccaatc 360

aa 362

<210> 4062

<211> 387

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-D2

<400> 4062

aattcccccggg ccgacccacg cgtcagccca cgcgtccgag aaattgctgg acttggaaat 60

ataaacgagg agagtcaagg agacttgta gcctatttgg aaagcaaaaa aaagacaaag 120

tcaccactcc agacctaagt tctctttgtt ggtggcggag gcgggtggtgg tggagcagga 180

gaagctgctt tggttccatt ctgtaaggca ccactttcg gaagaggagg aggaggagg 240

gggtgggaa gtgttgttgt tggttagct gcactattta cattctgttt atccgccagg 300

ccgtcagggtt gcgggtgaatt attagttact gttgttgttgg ttgttgtagc tgcactattt 360

acattctgtt tatccgcctg gccgtca 387

<210> 4063

<211> 394

<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-D3

<400> 4063

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cgtatacaga aaaagttact tttattgtaa gagatgctgc gcaacccgaa cacgaaagcc 120
ttcaagaaga ggaatcgat gaaaattgca tcgtgcttga ggggcatttt ccaaagaatg 180
aagcccaaca ggctgctgaa ctcgtgtcac catcgacttg agtcgagctt gaacaaacaa 240
caaggaagaa ataacgtcaa ctccaacaac tggtgagact attattatta tgtttggaaag 300
aaagagaaac aaaatgctta tctctcgta atatctcgat gacctattca ttcttccttt 360
gttttcctct ctttgtgct gcaatatata gtac 394

<210> 4064
<211> 360
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-D4

<400> 4064

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gaagaccgac acaggtactc gaggagaaag gagacccaaa ttaaggttag agaatggacg 120
ataaggaggg aggcaaaagg atatggtac tgcggtaggg gatatgaaag aagcagcacc 180
gactgttag caaaaacaca gcactctgca gaaaagagaa aatgtaaagt atacagtgt 240
cggcctgcca aatagtagag aagaaatcga tgaaagtgaa agcgactaaa agatgaggt 300
tacagaatgg cggtcctttt attaaggatc caaaggatc gaagtaata gacgttgaa 360

<210> 4065
<211> 395
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-E1

<400> 4065

cgtactggtc taggattccg ggccgaccca cgcgtcagcc cacgcgtccg cggacgcgtg 60

ggcccacaag tccgcccacg cgtccggagg caaatacggg aaagcagtaa aagaagaaag 120
agaaaaggaaa aaactgagta tcaggaagaa aagagggagt agatgaggaa agagggatca 180
aggaagtaag agtaagagaa ggagtaatgt gaatgaaagc aggaaagtat ttgaagaaga 240
gagtgtaaag cgctacattt ttgcataatg tcccaccgag tgaaagagga agcaaaaaga 300
aagaaaaaga attagccagg taagaccga atctatggta tcttatgctg tccaagcgaa 360
ctaaggctga accagtatct gtggaaaaag atttg 395

<210> 4066
<211> 295
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-E11

<400> 4066

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tttatttttgc ttgtaaaga caaactgttg tgaattctat acgttgttat tagggtggaa 120
cctctctcgt tattaaaagc tggcagggg caaccagtgt tggttgaact gaaaagtggaa 180
gacacttaca atggtcactt ggtgaacatt gactcctgga tgaacttgaa cttgagagac 240
gtagtttggaa ctacgtga aggcgaccgt tttggaaaa ttgctgaaat ttatg 295

<210> 4067
<211> 390
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-E4

<400> 4067

attccgggcc gacccacgcg tcaggtccct cgtccctcgt cgtctccctcc aacaagtacc 60
aaaacataaa atagaaaatg gcaactttac tatccaaaaa aagaagagca gtagccgacg 120
gtgttttcag ggcagaacctt aacgagttc tgcgtcgaga ggtgtcgaa gagggatact 180
ctgggtttaga agtcaaacc acgccgttgc gaacggaaat cgtgatccga gctaccagaa 240
cacaaaaacgt gttggagaa aaaggtcgaa ggatttagaga actcaactgctg ttggtagaca 300
agcgattccg tttcctgat tgaacagtgg aactttatgc ggaaaagggtt gcggatagag 360

gtttatgtgc cattgcgcaa gcacaaagtt

390

<210> 4068

<211> 98

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-E9

<400> 4068

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taaattcaac tcactgttct tttttcttt ttcttctc 98

<210> 4069

<211> 350

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-F11

<400> 4069

acccaagcgt caacaattgt tcattccacc atactctact cctatggatc ctaaatgcga 60

aaattgtcat aaagcagtgt atatggccga gaaagtgacc gttgatgaaa acagggcagg 120

tcacatgggt tgcttcgtt gttcaacttg caaagtgaaa cttagcctcg gaaattacac 180

actgttagat ggagttctct tttgcaagcc gcactttcat gaagcatttc tttctgctgg 240

aacatatcga gcacccgaca acacaaaaaa gaatatcgag gaagcttcaa ctaatgagac 300

tgattattgt gttgcgtcac aaacaagtca aatattatca tctcaaactg 350

<210> 4070

<211> 383

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-F12

<400> 4070

ccgggccgac ccacgcgtca gcccacgcgt ccgagcagct tctgtgttgt atcatgtgca 60

ggaacacgag tcaccagccc gatcttcac tattacctcg aggggaactc ttcttctgga 120

aaaaagtcaa gttccgctc gtgaaatagt gttgtgtgag gcaagtttg aacatcgag 180

ttgttggatg cacttgaaa agtgttaaa gacaggaaac aagtagttc gagatgtatt 240
tggagaggat aactatTTTgc atgcTTTgc aaaagaaaaac tcgcaacaca aagagtttt 300
aaaagtcttt cattaaggga tggCTTCCGT gagcgagttc gacacgcgtt ccATCCTTTA 360
tagTTTgac TTTCAAAGT ttc 383

<210> 4071
<211> 264
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-F3
<400> 4071

taccggtcta gaattccgg gccgaccac gcgtcagaac gaggtcgcg aggTTTcga 60
acgattagca aggttatATG gaccgtttag aaaccttata aacaggaaaa caagagcgTT 120
ttcCTgtcaa acaaccaaaa agggaaagta ctaagtaata ctaacagtac tggggcactt 180
aacCTTggga aaagacttGT tgtactTTG tgTTgttat tgcttgccc tacgtgagaa 240
atgaccggag ccaacgacaa aacc 264

<210> 4072
<211> 455
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-F5
<400> 4072

ccacgcgtcc gtAggcctt gtcgtcgTCG ttacggTTA cgattgataa tgcggTTgg 60
atATGGcaga cccccaaACT gaaAGAGCGT ttcaAAACAcA ggacgctata tcttAAAGC 120
agatcgcggg agtATCCAAA aagaATGCAA gatggtaggg gaatATTggg ttagGAATCA 180
aaACACCCAA ggaAGCCATA gagggagaAT atATAGACAA aaAGTGCCTT tttacggAA 240
acgtgagtat tcggggAAAGA atTTTGAGAG gaacAGTGGT ttcaACGAAA atGAAGAGGA 300
ctgttatcgt tcgaAGAGAC tatCTTCACT ggTTcgCAA gtacAGACGA tttgAAAAGA 360
gacacAGGAA tattccAGCA cattgcTCTC cttgCTTcG cgtgAGAGAA cgAGACGTT 420
gtaccattgg agaATTCCG ccgttatCCA agaca 455

<210> 4073
<211> 388
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-G1

<400> 4073

atccccgggc tgacccacgc gtcagaaaact ttgcactcac acattgaaga gcaaaaaaat 60
aggatgaaga acttgataca gggtcagatc gaggagcatg aaaagattct gtttcaatta 120
gaagacgctg ggagtcttt gcgttccatg gaacgtgatg ggaataaggc ctccttcaa 180
gtgcaagatc gcataagaaa tgcaacaaaa atttgtgatt cctggaaaga aatcaaaact 240
gccttggacc aaggactgaa attttatcac acggcactaa caattgccac gcaactgaaa 300
aataatgttg aaactatttt ttaataattc cagttactga gacttagaac atgtatata 360
ctaaaaaaaaat ggattgttta tccggatt 388

<210> 4074
<211> 382
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-G12

<400> 4074

ctccccggcc gacccacgctc tcaggtgctc agtcagaact gcttctcagt tagatacgca 60
atatgcctag tcataaggaa caaaataaaag gaattaaaat atcagctgac gtttacgcac 120
tagggttggg cggttattcgg ttggacgtac acggcagttg ggtcaactatg gtggacgcag 180
acgacctcag agccctcatg tttaaggaaa gcctcaagga aaagtcaaag ctgcatgacc 240
caaaatttt caaaagctat tatgaggaga ataaggacta cttttattat atgactcata 300
cggagaataa aatgtttctt tccccgaaag ttgcacgaga atacgctact ctgggtggaa 360
actcgtttct gcacaaatat tt 382

<210> 4075
<211> 384
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-G2

<400> 4075

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tgctttccaa cagaaaactca gtaacaaaga caagtaaggc caattacgac ataaagcacg 120
ttcgagtttggggac cctgaaaagg gagaagaacc gggattggtt acctactcga 180
ttcctctcaa agaatgcggt cccatggtgt tggatgcctt attcaaaata aagaatgaag 240
tggactctac ttttgtattt agaaggtcgt gccgagaggg aatttgcgtt agttgtgcga 300
tgaatataga tgaaaataat cgtctggctt gtttaactcc gtttagcagga ccgaagcaga 360
cagtgactgt atatccttta cctt 384

<210> 4076

<211> 371

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-G4

<400> 4076

atccgggcc gacccacgcg tcagacagtg tgtcgtaaag ggtctgagct ttacaaatct 60
gcatatgcaa agctcagtcg caatttctac tggatgcgtt ggaagattca cgcaacagta 120
acgtctttgg ccgactggac ggaaacaagt ttcggagagg ggctttattt ggtgc当地 180
gggtcggaa gtcatccatt gctacccgct ttgcagaaga caccttttgc gactcgtacc 240
ttccaaccat acaggattcc tatcacgcga ctgcagaca caaaaacgaa acttacaact 300
tggagatatt ggacactgtt ggacaggacg aatattccta tctcgaaaca cagctgacta 360
tcggagtaca t 371

<210> 4077

<211> 395

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-H1

<400> 4077

taccggtcta gaattccccgg gcccacccac gcgtcaggaa tcctgcaaag gccaactgaa 60

agcgccata tagttgttat tctctactgt ttgttgtccc ttgtttaag tgaacaacag 120
gaaaactcctt cttaaccttc cgggacgttg actagtgcgg ctgaagtgtt cagggaaat 180
gcacacctacc cggttagtagt aaaccccttct tcttccaaag agatagaagt agcatattct 240
tttagtggttt caacggatga aaaaagtata cagcctggga ctctggtaga ttgttttagtt 300
ggagtggcaa atggaggacc tttccatat cgaaatattag cagttggtagg agctttgcac 360
tcccccttgc agtttaacta ttatgttcaa aactt 395

<210> 4078
<211> 323
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-H10

<400> 4078

gtcagcgctg ttggtcactt gtagaatgac ttgttaacaca tgagccaaat gccataataa 60
atgtcactgt gcttgactcg ttctaccta tttatgttagt attcggagcg ggcagcagt 120
gtacaaacgt gaaggatagg ggtccctcgc cgtcgtggca acagaatgtg gttttgttag 180
gtttttagt gtttagttttt gtataaaaga attggaatag aataaaatat gtttcgcgcc 240
tattcttcta caacaaacga ctaaacaact aacactgaaa aaaaaaattt tttttttttt 300
ttcgctctac aggatccaac ctt 323

<210> 4079
<211> 342
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-H3

<400> 4079

ttcccggtt gacccacgct tcaggattcg tcgcaagtct ttgaaaaaaaaa gacaaaaaaaaa 60
ttcaaacgtt tccagtcgga taggtttaaa agagtcaagg aaagctggag gaaacccaaag 120
ggaatcgagg gcagagtgcg tatgcgttca aaggttcgg gtttgatgcc caagatcggtt 180
tatggacacg ataacagaac gagacacttg ttgccaaacg gttccacaa gtttgtacta 240
aataatgtga aagaatttggaa cgctctactt atcttgaacc gcaaataatcc accacaaata 300

gcgcacggag tatcttcttt taagatgaac gaaattttgg aa

342

<210> 4080

<211> 390

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-H4

<400> 4080

atccccggcc gaccacgacg tcagcccacg cgtccggag caccttgacc gccattggca 60

tataccttac tcgagttact tgactgtaag tgatattgtt gtagctctt tgcgttata 120

aggtcagcga gacagaggag caagggcgag aaacttaggg gcaagcgaga gaaccttcaa 180

cgcggcgtt cgttcaggtt taggagccat ggctttagga acaatagcct cttagatata 240

gtatacagca gttggcaagg ctgcagctat ttgttattc tgtcttggtg ttctcattat 300

tttgtactgt ttggtccgac attatcatat agtttccaa gtagaggaag acatttgt 360

ttccactact gttttcccta gaacatttc 390

<210> 4081

<211> 386

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-H7

<400> 4081

ccacgcgacc gaaagagaga aagagaaaaga gagcgcactg cacagcttaa gatgacgacg 60

aggtgttggaa aagtaacctc ttgcgttattt cgtttatcaa ctcgagttac cacacttcgg 120

acctctgtgt gccaactctt atccgaaagc aagtttgggg catttgaata cttccaactt 180

aaagttgagt gaagaaaaagg aaactttcca ctttatgcc 240

ctgtcttaca acgaagatgt gagggcagtt tcaggtatat atgcacctga tgaacctcct caggctccac tacctttaga 300

ttatgagttt aacggggaat gtgacttttc tatacagttt gatatgcacg aggacgtttc 360

tgatagagaa gcagctatat gagttt 386

<210> 4082

<211> 375

<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-H9

<400> 4082

acccacgcgt cagcacgaca cagaatggat actttttaa tatatgactc caccagtcaa 60
cgattcggtg tagctgctga acacgttat gacgtaaacg aaaataccaa gttgcgttgg 120
ggtgggaaag ttcgtcacgg agaatcgggg gcggcaggat atgtcattgc cgaatatgac 180
tttacggttt ccaaagaaga ttttccgata aacgttcgtg cacgtgcgt atgtaaaagt 240
aaccagtgc a tcggcgatat tcgtgccaaa aagaagttt aagtggacga agacacttct 300
ttattcttct tagccaaagc ttgtactcag gaactaacaa aaggaagtta tattattgg 360
aaaacctgag tgaca 375

<210> 4083
<211> 358
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-A1

<400> 4083

taccggtcag gaattcccg ggccgacccac gcgtcagcct ctccaagaag gtgtgcacg 60
gctgtcgaaa gaacgtgctg tgaagtgaga gaacgtacga gaaagccaag tgaggaaaag 120
aaggcaagta gagggcggcc cgagaaaaaa gagggcgtaa gacgtgatac agagtaggaa 180
gaaaagagaa gagagctaga aaggaggtaa aagaagagta aaaggactag aagaggtacg 240
gaattcacga agaaggagcg tgaaggaagg aggaatccca agtaatcgag gaagaaaaag 300
cttcggtgaa agcgtgaacg gatTTTGTAC acactgcccc tcaagttctg gaagtgtg 358

<210> 4084
<211> 314
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-A4

<400> 4084

acccacgcgt ccaccttaat taacaatcca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaggaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaagggaaag acgctccaaa 120
ggtcttaaac attacgtAAC ccatcaagaa aaaataagaa tttcttcaaa atggcaccta 180
aaattaaatt ccctggcggt tcTTTaaaa aaaaaggggg gggaccccc aggttttac 240
cctaatttaa ccctttgca aaaaattcac cctttcaaa aggggcctaa aaatcaaatt 300
tccgggcct tttt 314

<210> 4085
<211> 403
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-A6

<400> 4085

ggtaccggtc aggaattccc gggccgaccc acgcgtcaga tcttgcCAA gtgagaatgg 60
cgcaaaagaa tgaaaactct tgTTgtatgc ttttgcAgt gaagagacta agcaaggacg 120
ctgttgtaCC tcaaagaggt tcgaaacttg ctgcaggTTA tgacatttg tcctcggaag 180
actgtattgt accagctcgA agtcggtaCT gtgttaaaAC tgacttggca gtggcgattc 240
cctcgggaca ctatggaaga atagcaccca gatcaggact tgccttaaAG catggaatcg 300
acgttaggagc tggtgttata gatgaggact atcgaagaag cctcggtatt attttagtta 360
atcattccga agaggatttc catatatcca aggaaatcg aat 403

<210> 4086
<211> 345
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-A9

<400> 4086

caaaaagagt caacccttca ctgggtattt cgTTTgaggg gtggaaatgca gatatttgtg 60
aagacactta caggcaagac cattactttt gaagtggagc ctTCAGACAC tattgagaac 120
gtcaagtcca agatacaaga taaggaagga atccctccag accagcaacg tttgatattt 180
gctggaaagc aactggaaga tggTCgtact ctTCAGACT ataatattca aaaggagtct 240
acccttcaCT tggTatttgcg tctgaggGGT ggTTgctaaa tatttcagca agtagtttag 300

tttagccctt attttctgaa taaatattcg cagttcttgt caaaa

345

<210> 4087

<211> 394

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-B2

<400> 4087

ggtcaggaaa tcccgggtcg acccagcgtc ggccaaccct tcggccaacc gttcgcaaa 60

aaaatggcaa ggagggtggg ttccctaaaa tcagttagg aatttgcctt ggtctaattc 120

ctgtgcttat atcggtgccg ctatTTTGT gcatgttca ggaaattggc gctatatgct 180

cgggagtaact ttggtatttt catctatatt actgatagcc atgcttacat tacccgaaac 240

ccctcggtgg ctgatgagaa aaggaagaga ggggcagtcc tataaagtat ggagtattgt 300

gcgaggattt gatactgaag aagaaagaca ggagTTTTT gtgatgagaa agacggtgaa 360

acgggagttg gaagagtcta aaaacagata tgtc 394

<210> 4088

<211> 416

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-019-Q1-E1-B3

<400> 4088

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gttaccgcaa aaaacttacg ggcttggcac gtaccttcc aaagtccgtc ccccgaggag 120

tggtctgaga gggggatgtt tacgaaatgt gaaattttca accacanacg acctgcaaag 180

ttgttatcta cgaaaatgag aggaggcgac catgaaagga gagaacttag tcgtcctatg 240

cgtacgcttg attccgcttt cgacgaactt ttagctttg cgccaggatcc ctggtccatg 300

tttcgctctc catggagtct gtcgcccaga agtatggcag tagacacgtg gatgcctcgt 360

gttgacttgg tggagaaaagg aagatggctt ttatgcatac gtggaaactac caggac 416

<210> 4089

<211> 399
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-B4

<400> 4089

ggtcaggaat tcccggtca accaaggcctt caaacggaat tcacaaggaa ggaccttgaa 60
ggaaggagga atcccaatta accaaggaag aaaaaccttc ggtgaaagcg tgaacggatt 120
ttgtacacac tgcccgtcaa gttctggaag tgtgcttagga atgtgaggaa aagaaggcaa 180
gtagagggcg gcccgagaaa ggagagggcg taagacgtga tacagagtag gaagaaaaga 240
gaagagagct agaaaggagg taaaagaagg tttgcacgg ctgtcgaaag aacgtgctgt 300
gaagtgagag aacgtacgag aaagccaagt gaggaaaaga aggcaagtag agggcggccc 360
gagaaaggag agggcgtaag acgtgataca gagtacaaa 399

<210> 4090
<211> 392
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-B7

<400> 4090

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gtaataaaaa tatgtagaca cggggatcgt tcgccactga acacttatcc caacgatcca 120
aaaccttacc atctctggcc aggaggccct ggacagttga cagctgacgg aatgagagct 180
catttcgaac ttggcaggca acttcgcccga cgatacgtag attcagggtt tcttgaccaa 240
aatctgtccg tcaacgaggt agttcagct cttgctgtg aagccgtccc atctgatatt 300
tttatggttt ctataggta aagttgtatc cagcgatacc gatcgactc tcatgagtgc 360
ttattgtcag atggctggct taattcccta tg 392

<210> 4091
<211> 382
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-C1

<400> 4091

ttttcaagg caacaagaat gcaccttta ttaagccaat gtggaaacta tctttcagg 60
aaccttgtct tctttgggtt cgtaaatctg cacataatca ggcagtggtt tcgaaggacc 120
tcttttcct tctgggtcat acggcaacat gatggtaact ttgataccta gcactccttg 180
acgcataagt acgtggcgca ctgcagtgtc tacatagtcc ttgactggtt gtcccagtg 240
caccatatat ccatccgtaa acttcatcgt tttggcttc tgagctctca acaaaccact 300
cacagtgacg acgcagccct tggcaccgct ttccatcaca aatcgtagga cgccataaca 360
agctctacgc acagccaatc ca 382

<210> 4092
<211> 84
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-C2

<400> 4092

cgggtcgaac cacgcgtccg tataaagtgc tggcctgga aaagaacgct tccgagagag 60
aaattaagcc cgcgtagccaa caac 84

<210> 4093
<211> 453
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-019-Q1-E1-D3

<400> 4093

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aaaatattta ctcattttta caggacaaga ggttaccatt gtctaatttta aaggaatcct 120
tgaagaggca acgagtacaa gatgacgaac acgacgaagg tttgggtgag gatgaggatt 180
tagatgaaga agaagaagag gaagatgaag attttgcattcc caacaagaag gaagaaagtg 240
atcaggaaga aggtggtggc tctgcacaga gtgatgaaga aatgtcagag aagagtgacc 300
aagaagaagg cgatgactag atcatattct tgggtaaa ctgtatttca atattctctg 360
gcgacatgga aatattacga aacattgtct atcgataaat acgttgccag atgagaaaca 420

antctaaact tcaagaaaaca catgttggaaa acc

453

<210> 4094

<211> 405

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-D5

<400> 4094

aattccggg tcgacccaag cgtccgagtc attccaccag gagagtaaaa gcaagaaaaga 60

agagagaaaag aaacaccacg aaatggacag aaaatgttt ttctacaact gctcacagat 120

aaacgaacctt tctggtagaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaggggg ggccgccaa 300

aaggttcaaa gtttgtttac ccttaaggg aatgtaaaac accttcaaaa gatgccccaa 360

aatttaaaaa agcgggcat tgttaaaaa ctctggtacg gaaaa 405

<210> 4095

<211> 431

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-F1

<400> 4095

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gaagattggc gagtatcggt agacggagtt gaccattgga ttcctttta tttcaacag 120

gaggaaacct tcctttgaa gctggatttg cccatcgta ctggttcggc gtttttaggc 180

tttggttttt tggttatgag tttcacctgt atgaatatta ctattccacc ttacaacagt 240

ccacagatca tcaagatgg ggcagtattc ataagcattt tgggttttt gtgtttttta 300

tcctttttt ccattttta ctggatgcga aaaaatgctc ctcgaacgga cttatagatg 360

cttatacgatg gagctttccg cggtgtaatg actttgaata ataaagttgg gtgtttcca 420

tttattacga t 431

<210> 4096
<211> 413
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-G4

<400> 4096

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cttcgagtgt tggcggcaaa cgacgagttc aagggttgtgg ttgcgttaacc tcgtgtcgac 120
ctctattgtt ttcttttct tttcgtcca acgggaggaa aacgattact gctttgtaac 180
caaggcagcta gtcactacaa caggacaggg tttttggaa tatgtaaata tgaaagatgg 240
ttgtgttgtc catgtcggttgc tccccaaaca caacaacagc aacattggtt accttttat 300
ccctattact attagtatta ctacaaagag aatcctatcg ataactggat aataacgagt 360
aatacgaaaa agagacaatg gattggtacc cgacaacgaa tattacccat act 413

<210> 4097
<211> 460
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-G6

<400> 4097

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gttctgttttgc tttcgtacag acgatgcca aaaaatgagtt atttcaagca gtagagaaaa 120
cagctgaaca gtcatatggta tgcagaaggt gtcatggcga atattgatcc tctagcctct 180
acagaactgg cctatgacat catccgaaag ggagttcggt atgagtcggc acactttatc 240
caataccgag ttttgcacc tgcaaatacg atttacgatt tggttttaaa attaaagtat 300
gaccctcca tcttgagggtt caagttctg agacggcgac tggaggacgc tggatcat 360
tctaattcctt ttgaaagaat tcttccacgt cgaagcttgc caagaacaga tcctgcctt 420
agtttggatc ggttcgtaca tgatctccat gaaaaggaac 460

<210> 4098
<211> 75
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-G7

<400> 4098

cagaggatca aagcatatgt acgcgtgtat gcgaagtcat agctttcta cagatgtcgc 60
ctaaattcaa atgaa 75

<210> 4099

<211> 329

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-G8

<400> 4099

ggtcaggaat acgcggtccc aggcacacgt acgcgtacgc gtcagggcgg atcatggtct 60
catcaatctg taggtggcaa attattgagt tcatcaggtg ctgcattact taacctcgag 120
tcgacctcaa gtgtggtcat ggtctatgac actagtcgaa ggatgatgac aaaagtgtt 180
taacaaatca agtagccact ataacaagac agggttttg ggaacattgt gataagacag 240
atggatgtt tactatgtcg aaggtcctct cattcaaatt ataagcatag attagcgtt 300
tatcgcaatt acaacatact ataaataca 329

<210> 4100

<211> 352

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-019-Q1-E1-H5

<400> 4100

cccacgcgtc cggccacgctc tccggaaaaa gaaggcaagt agagggcggc ccgagaaagg 60
agagggcgta agacgtgata cagagttaga agaaaagaga agagagctag aaaggaggt 120
aaagaagagt aaaaggacta gaagaggtac ggaattcacg aggaaggagc gtgaaggaag 180
gaggaatccc aagtaatcga ggaagaaaaa gttcggtga aacgtgaac ggattttgt 240
cacactgccc gtcaagttct ggaagtgtgc taggaataag caggagaagt agaagaggt 300
agaaaaagaa gaaaggaagt gaagacgtaa gacgtaaaaa aaaaaanaaaa aa 352

<210> 4101
<211> 462
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-H6

<400> 4101

taacggtcag gaattcccg gcccggccac gcgtcagaca gatattgagc ttttggaaaga 60
taacacaatg aggagtttg ttccggcaata tgccaatgac caacagcaat tctttatga 120
ctttctgag gtgtttggaa aatatatttc tagaattcat tgcaatcaaa cttccacagg 180
accttgcgg ttggatgaca tcgggttacc cacgtctgct gctccatcac cgccgtcg 240
tgttccttca tttcggaaac cttagttcg ggcccttctt ggaccttagtt ttccaacttt 300
tgatggtgag ccctcagctc catcatcatt ttctcccttc ggaaggcagca gtggacctga 360
atttttcccg atttaatag tacagaacca agtttagggt agtgtacaac tccaaagggg 420
gttggtagt aaagccaca aaaaggtttcaagcttc ag 462

<210> 4102
<211> 151
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-H7

<400> 4102

cggacgcgtg ggaaaaaaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa 60
aaaaggggagg aagaacaaaa agataaaaaag cttaaataag catgaatgaa aaggtgaaga 120
ggtcttcgaa aatgtcacct atgggtcagt t 151

<210> 4103
<211> 403
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-A3

<400> 4103

tattcattat atgatgagct ttgaacaaaa ttggaaatcct attcgatgct tatttcgatt 60

ggctatttca tggagcagac ttcaatataa ttgctggaaa caggttctta aaggctcaa 120
ctcatgtcta atgacagtgc aacctattct tgatcggtt tgcccttcat cggattccag 180
taatacccaa cgattattgg aaacttttgt acaggatttc atcgtggaaa caaaaaatat 240
ggatgagttt gctacaagct gggttgtt gacagaaaag gaaaacttag attgtattca 300
attcgatact ttcaaaggac cttaggatt ttcaacgagt gaatttccta atgatcctt 360
tgaagacact ttattgtcga tacgtaagac ttattggag ttg 403

<210> 4104
<211> 193
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-B12

<400> 4104

aatgatcgag cttagaaca cagagtgatt attactgctg gttacagtgg agagattcga 60
atatatgaag atgtggtgca actataatct acatacatga cagaatgcgt ttcaatggca 120
tataccgaag atacggaagt ttcaagctga cttagttcac aataatcatt caatcaatat 180
ttgatgc当地 agc 193

<210> 4105
<211> 355
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-B5

<400> 4105

cgactgttta gcaaaaacac agcactctgc agaaaagaga aaatgtaaag tatagagtgt 60
gcggccccgag aaaggagagg gcgttaagacg tgatacagag taggaagaaa agagaagaga 120
gctagaaaagg aggtaaaaga agagtaaaag gactagaaga ggtacggaat tcacgaggaa 180
ggagcgtgaa ggaaggagga atcccaagta atcgaggaag aaaaagcttc ggtgaaagcg 240
tgaacggatt ttgtacacac tgccctgtcaa gttctggaaag tgtgcttagga ataagcagga 300
gaagtagaaag agagttaggaa aagaagaaag gaagtgaaga cgtaagacgt gaaaa 355

<210> 4106

<211> 234
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-C3

<400> 4106

tgatttacga agtgcacagt gcctactatc aaacctttt gactgttct ggaaagtcag 60
ctaatcggtc ttccggggtt gataagaaaa cgtggatgc catacgtgt gaagtagaga 120
tgcaagttgg ttagtctgtt gtagatgtgt ttttcgtgt gcaagtaaag gttttttgt 180
ttgcgtgtcg aaaaaaaaaa caaaaaaaaaa aaaaaaaaaa gaaaaaaaaa taaa 234

<210> 4107
<211> 392
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-D6

<400> 4107

cccacgcgtc cgtacaagag taatggataa gtattcacat tttcatccat ggtcttatcg 60
aagagacaag agtcgttct ctgttttt tggtggcaat ggtcgtaaa aacttgtagg 120
tggttgtgg tgggttgcg tattatctt gtagttctt ttggAACCTA ccaccaacta 180
gtataagcat tgTTTcatc tacaacaaca acatcaacgg taggataaaa cttagctctg 240
taatatccga caatggagtt cgcctaggaa gcgttgtt gtccttttta gaacttgtcc 300
ttggTTTATC tgggtgtgtg caatggtcta catTTTcTT ttccaattgc caccattcaa 360
gtgattgaga agcgctgtac attgcttcc tt 392

<210> 4108
<211> 340
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-D8

<400> 4108

cccacgcgtc cgccccacgcg tccgaagcca tatctatTTT tagtattgtg ggatttgc 60
ggtaggagc catctgcattt gcgattatcg gagcgtggc ctaagaataa aatttgggg 120

agacgtcgta gtgcagatga ctcgcatgtt tggtagttgg ttcaagtttgc acaagagaaa 180
acatttggta ctacttctta caaataaaaa aagttcaagg acaaattgtt gataaatgtt 240
gaactgtcaa agaaacattt gtaatacagt aatggggaga gtcacaggca gtgagcggag 300
atagtctcat gtttagcagat ggtggggcgc aagctgtcaa 340

<210> 4109
<211> 434
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-F10

<400> 4109

tacaatggac caagtgttgc atggctccta ctatacggg tttaaagaaaa gtaagacagt 60
tggctaaaat acaaaaaata agagagcaag tatggaaaga tagacaagga atagtagaga 120
aagatcctta tgcggtttct actctattag aacgacatcc tgagttgacg ttggaagaaa 180
aacaacaatt gcaatccatt gaacaaggaa tagcacctgc tactggacag tcttatgatt 240
atcttttgc cgatatattt ggttagagcgt tggAACCTCC tccacctgga gtacgttctc 300
ttcgaaagcc tttaaggaag aaacccaagg aacctcattt tgaacatcac ttacaacctc 360
gtatatggga taatccattt agtgaatttc gagagtcgga agcacaagaa cgttgaaag 420
caaagtgcac aaga 434

<210> 4110
<211> 210
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-G1

<400> 4110

cgacgcgtg ggcggacgca tgggttccac caggggagta aaggcgcaag aaagaaaacc 60
aaagcaattg acgggaatcg gaaaaagggg tggatcacgt aaattaatcc gataaaccga 120
gaaccttacc tctccaagaa ggtgttgcac ggctgtcgaa agaacgtgct gtgaagttag 180
agaacgtacg agaaaagccaa gtgagggaaaa 210

<210> 4111

<211> 286
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-020-Q1-E1-G6

 <400> 4111

 cccacgcgtc cggtacattc aacatcatca aatgccaaag ggaggaaaga aagattcttc 60
 aaagaaaagaa gccacaagta aacctgcagc agcagatgct acaaagacga cagaaaagtc 120
 tggtccggaa gccaagttga aggaaactgg tgcaaagaaa caataaaaag ttgactatgc 180
 atgtgcagtc ctgttatgtt ttgtgagttc tgtttgatag tttccagcta ttcttttgt 240
 agtgaataaaa gagaaaattt tttatattt aaagaganat agaaga 286

 <210> 4112
 <211> 330
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-G8

 <400> 4112

 gtgggaagta aaggcattcc tgcatggcac aaacaacatc gcaaaagtcc cctattaacc 60
 cgaaaaccgtt cctccacgac ctgattggaa agccacttat tgtaaaactt aaatgggtc 120
 tagaatatag aggtttatta gtgtccctag attcttataat gaacttgcaa cttacacagg 180
 cagaagagtg gataaatgga aaaatggctg gaaagctagg ggatgttctt ataagggtc 240
 acaacgtttt gtatgttaga ggaggcgaag gtgaagccaa cggagtacaa aagtgacaca 300
 aataaaacttc agcacgttcc taggtaaaaaa 330

 <210> 4113
 <211> 405
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-020-Q1-E1-H12

 <400> 4113

 aaacctggagc tattgacaac tccaaacaact tcattgagag cgcgtatgga tggcttattta 60

tttatgcgaa atcaaagcc gacagtttgtt ttgcaagaga caagactcaa tatcgtanga 120
gcagtgtata ttcatccctc ggcaaaagtt gaaagcaatg ccaagattgg accaaatgtt 180
accattgctg caggtgtaga gatagctgct ggtgcaagat tgaaggattg tattatTTTA 240
gaggatgtga acatcataga acatgccttt attagtcata gtattattgg ttggggTTCC 300
attgtggatg ctggactcg agtacaagga acagcggaga atccaaccat atttggagca 360
agagtagtta cagaaggaga gattgttgtt cgcaattgtta cagta 405

<210> 4114
<211> 468
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-A11

<400> 4114

gggacgaccc acgcgtccac ataaaatgcc caatatttgtt gagtcaaaat ctttcctc 60
ctccttggaa aaatttggaaa agttcgaaaa gaaaatggct ggattgttca attcaggatt 120
ttgaaatgtt agatataatt gtttatatt tacgaatggaa aacgatggaa accgcctacg 180
gctcgTTTT tgattggcga tgaagtaaca caagtctatg ctgtcgagc tattcatcac 240
gttccagaaa tgaagtcttt tggagatgtt gacacgagtg ttgtattgtt acacttccga 300
aatggagtaa ttggcactat tgacaattct cgcaaggcag tttatggcta tgaccaacga 360
tgtgaagtat ttggttctca aggctctgtt cacatcaaca acaattatcc caattccgca 420
gttatttcca cttagtcaaag tattatgcgt gatttaactc ttcacttt 468

<210> 4115
<211> 427
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-A4

<400> 4115

ccgggtcaac ccacccttcg gcccacgctt ccgcggaccc ttggggTTTG tgtcaaagg 60
cccgctgttt tccttggta ttataacgac gaccaagcaa caaagaacat ttgtatgaaca 120
tggttatttc tgtactggag atgtctgcgc atggactat gacggcacac tttccatcat 180

agaccgaata caagaattta ttcaagttag ctcaaggaga atatattca ccgggatacc 240
tgcaacaaca gtaagcctcc tgtaagtttgc ttgaacagat gtggatttat ggcaatagcg 300
aggaaagcga acttgcgtgtactgcac cgaatcaaca ccaagcacac gaatggcat 360
aagagaatca gaaggaacga catttgcatttgcggacagac ttcaagaaag 420
ctgtttt 427

<210> 4116
<211> 220
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-021-Q1-E1-B3

<400> 4116

attccccggc cgacnctcg aggaaattat tggaaaattt ggcattcagg ggaattaagg 60
gccccacaaa cccatttaa agcgggtcc caagcgcacg cgcatat ttcacaccat 120
ttttataacc ccacgctgaa catgatgaaa gggcggtccc aatccttttgc acctgcagta 180
aaaatttggc aaaaagagtt tccaagttac ttgtgcaaaa 220

<210> 4117
<211> 404
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-C10

<400> 4117

cgaccaggc gtccgaaacg aataatgttt tggacatta aatttcgtcgatcgattga 60
cgactggcga tgaaaacgac ttggagaccc acatggcac ttatccatcg actttatgtat 120
aaaaccacaa gtagaattgt tcataccaa aaactgggtt ttcaaacaag ccctttcaa 180
acgtcccttt ttgtcccttc gtctgctgaa caagaacaag gcgggtcctc gaaaagtcgc 240
cagtctcatg ctttgcctc ctttgctacc gtacgaccca ctgtatttgg taccatatt 300
atgacgtgtc ccattttgaa agcagacgt gagactctag agcctccaaa atacccttgg 360
aaccattctg gtcctttgtc ttccttcgtat gccgctgcca ttgc 404

<210> 4118
<211> 414
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-C9

<400> 4118

tcgaccagg cctccggaaa caactattct taccattgaa ataccgcatt aggttcgtt 60
tggcagatta cacaggtttt cggttaagaa agatgaagct ttgcccaca gtggttctt 120
cttaccaggc gcggtttgca ccagactcac ctatgactt gacgacatgg agatacgaat 180
accttagaa gtggatacac acaccacatc ttgcaataga cgtatttatt gcaaacgtt 240
tcccaataac taagtgttga agctctagga atcggcttc gtgcgcctt gatatcgact 300
gcatgtactg gaacccttgg ttgtgccata tttctttatt tacctccaga atatacgatca 360
ctgaaccttc gttagcgtac gcagcacttt tctgaagatt taaggaactg gtta 414

<210> 4119
<211> 452
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-D11

<400> 4119

gtcgaccagg gcttcggcag cgcgttgtc tccttggaaat cttcaaactg ttcatttgcc 60
agatgatgtt ccattttgtt ctccattgtc gtgtcctacc tccaatggta ttcgtttcg 120
tggtaaacta ggaaaaggtg gacgcattat tttgataaaa gttgtggata gcagtcattgg 180
aattgggaca cctgtcgacg agggaaagga aagatggctc ttatctcgt ctaattctaa 240
tttattgcca gatgattcag tggctgttcc ttgtgaaaag tcaaggcctt ccatctcgac 300
gccacaatcg aattctgtgg aaagcatgtc attgaagtgg cttcaaaaga agaatggcaa 360
atgttttagag aacggtagac attcctgtga agaaagagag tggagtggtt attttatcgt 420
tgcttcggaa tctggggaga aagactggaa aa 452

<210> 4120
<211> 466
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-D9

<400> 4120

tcgaccagg cgtccgggtg gataaatgat gtaaggaata taagcatgtt agtatgctgg 60
atatggttgg aagtaatagg aggagtaaag aaggagtaca gaggaataat aagcagtata 120
ggaataataa atataccgat aataaagtac tcagtagagt ggtggaatac cttgcacatcg 180
ccagttagta taagctcatg gggaggaagt ataggaagag aagaagtaga agaaatagt 240
aaggtaataa taataggagt aatggtgagt atagagaaga acatgaggaa gaaagaggca 300
aatacggaa agcagtaaaa gaagaaagag aaagaaaaaa actgagttac aggaagaaaa 360
gagggagtag atgagggaaag aaagatcaag gaagtaagag taagagaagg agtaatgtga 420
atgaaagcac gaaagtattt gaagaagaga gtgtaaagcg cgtaac 466

<210> 4121

<211> 198

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-E10

<400> 4121

gtcgaccagg cgtccgcccc cgcgtacgcc cacgcgtccg ggaaaaatg gaacaagcac 60
tgcaagcggtt gagaaaagaa ctgcgactc gagaagctt agatgctccg aacaaagact 120
gacaacacag agtggaaagt atttgcaaatttggacaaa ataaatatct ttttgtttcc 180
accagaaaaaa aaaaacaa 198

<210> 4122

<211> 440

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-F1

<400> 4122

aggtaaccgtt ctagaattcc cgggtcaacc aagccttcgg cggacccttg ggaaggatgt 60
cgtcttcctc gcaaaaccag cacaacaaaa agaacaaccc accaacagaa ataaacaaag 120
gtttaagaaa aagacccgca catacggaaag aaactcgcaa cacagacaat gactcttcgg 180

tagaaaaagcg aaccaatgct tccctatttgc aatgtcatat ttgtttcgac tctcccaatg 240
accctgtagt gacaccttgc ggacacttgtt attgttggtc ttgtatttac aagtggatgg 300
ttgctcatcc tgaatgtcct tcctgtcctt tatgcaagtc aagtattgag aaagacaaga 360
taattcctat ttatggtaga aatgaggagg aaaaagtggaa cccaagaaca aagcctgttt 420
tggataacaa tattcctgcg 440

<210> 4123
<211> 241
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-021-Q1-E1-F11

<400> 4123

tcgaccacgc gtccgaaaaa aggcatgttc agtcttccgc tgattattca gttccatttg 60
tcanaatcgg tataagggtca aagtctcgat aagaccgtgt cagattgtct ctcgtcattt 120
tcatcttggaa tgaggttatg aaaatttgc gtgtcagtat attgtcattc aattctgaaa 180
cgcgtacctt ttgcataatg tcccaggag tgcgctctga aggatccaga cttacgtaga 240
c 241

<210> 4124
<211> 448
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-G12

<400> 4124

tgggaacgaa ggaggtgtat gtaccgctaa aatgttaccg accggaggta caaaacggga 60
aggcacttgt taatttattt caaacaataa ccaaccgaga gcttttcgt ttggtaaatt 120
ttcggttccaa cataataata ttttacttta tcacagccac tttagaacta ggaaaccaca 180
gattggacct tccgagggtgt gccttcacgc gcaactcttt gtgaagcgaa agtcagcaaa 240
ttgtcatatt tgtgtactga gggcaaaaat aagtacaagt aaaagtataa aatgcccaaa 300
cagtaatgaa aaggaaaagtt tggcgagttt ggaggaagct tttgaaaacg ctcttcgagt 360

ggtatggat aggaaaccaa aaggctattg gtccagtatt gaaaatctca ctaacgaact 420
cgggagattg atcgaaaagt atgattcc 448

<210> 4125
<211> 432
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-G3

<400> 4125

cccgccccga cccacgcgtc ggcccacgac tccgcccacg cttccggcaa gaaagaaacc 60
caaagcaatt gacggaaatc ggaaaaagggtt gtggatcacg taaattaatc cgatataaac 120
cgagaacctt acctctccaa gaaggtgttg cacggctgtc gaaagaacgt gctgtgaagt 180
gagagaacgt acgagaaagc caagtgagga aaagaaggca agtagagggc ggcccgagaa 240
aggagagggc gtaagacgtg atacagagta ggaagaaaag agaagagagc tagaaaggag 300
gtaaaagaag agtaaaagga ctagaagagg tacggaattc acgaggaagg agcgtgaagg 360
aaggaggaat cccaagtaat cgaggaagaa aaagcttcgg tgaaagcgtg aacggatttt 420
gtacacactg cc 432

<210> 4126
<211> 143
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-G8

<400> 4126

gttgttcac aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aagggcggaa 60
caacaataag ataaaaagca atacataaac gtgaatcaa aaatactatc acatcaagac 120
tgtcacttca aattcaattc acg 143

<210> 4127
<211> 312
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-H1

<400> 4127

cccacgcgtc cgaagacagt gaaaaggatg ccaaaacttc ctacttgaa aattatgg 60
aacgacgcac gaagaccaga gtctactcca ttctatcttgc ttacttgat cgtttgacc 120
tttcgttgttgcgtttaa accgaccgat gaaaactata aaaactctcc caatccgagg 180
tttggaaagaa atgctgtgaa ggagtcccac gattccaaac actagaaata ctttgggtgt 240
tggataaaagt gttatTTTtgc ttgtaaaaaaaaaaaaataaaaaata aaaaaaaaaac 300
aaaaaaaaac aa 312

<210> 4128

<211> 444

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-H3

<400> 4128

cggtccagga attcccgcccgcgacccacgc gtcggccac gcgtccgcac gaaaatttgc 60
aaaattctgg cgagaatcg ataattacgg cctcattgcc gaattgtcga tacatcgat 120
acaacttggt cccccgtttt gtgacaagat gtcacgttgg tgaaccaaca gacaactctg 180
cttgctactg agttttcttgc tcggtttgc ccacgtttct tggtcagaag aattgaatca 240
gtatgttta tgtcacaacg ctcaaagaga aaacaaagcg aatcttaggag tactgactcg 300
tctgaggaac aagaggctag tattgaagaa tctttacac cacaattacc ttctcttgc 360
acactattac aaggtacgac agatattcca agaaacaaac aaaggctctc aaagagtgaa 420
agtaaaaaaaaaa aatcgagtgt ttaa 444

<210> 4129

<211> 424

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-A11

<400> 4129

gtaacagtga catggagtca tgagagtatg aggagtggag agaaggagga gatggagaag 60
ggtttgcgttgc taacgataat gttggggata atatTTTtgc tgatacaagg atatgaatat 120

tatgaatcag agttaggat aacggatgga gtatatggga gtagttta tatggAACG 180
ggatttcATG ggatgcACGT gttAGTGGGA gtaATAATGT tatcgatGGG attgataagg 240
agtataAGAG gagAGTtaAC ggcAGAGCAC catgtAGGAT tgGAAGCAGG gATATGGTAT 300
tggcacttG tggatgtGGT atggttattc ttgttGtGA gtatataCTG gtggggAGG 360
gtatAGGAAG tatAGGGAAT ggaAGGAGGA aggATAAGA aggATGAAGG agatAGGGAG 420
ggca 424

<210> 4130
<211> 372
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-022-Q1-E1-A7

<400> 4130

tcttcaaATG agtctatcGA gacgttATTG ctaaAGACGT ttcctAAAGA aatccCTACT 60
tcgtattGTC tcgtgtatGC actttGGCT attccAGTAC tcgcgcTCGA cgtgtattTA 120
tatcttGCCG tactCCACTT gaactttATT gcttcaAGCG tttcgTTGAT catcggtACT 180
acagtcggct tggtgcttCT agttacgtCG tatcataAAA ctgcataTGC caagtggTCT 240
aagctcgatc gcacaACAGA gcaACCAACC aagagCTTT tcaaggtaa tttgtcggca 300
tnacgaagtG gagttgagAG tcacctatGG ctccTGGAAA gatcctcggt cagttacAGT 360
gtantgataa ac 372

<210> 4131
<211> 430
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-B10

<400> 4131

gaatggcggt cctaACGGTA aggatccAAA ggtAGCgAAG taaatAGACG tttgaaAGGC 60
gtccAGTATG aaaggAGAAA cgagtgtAGC actgtctAGT cgtccaACTC agcgAAACAG 120
caataACTGT gaaaATGcAG taaACTAGCA gtAggACGGA aagACCCCAT aattctTGAC 180
tagatAGGTT tagggAGGAG agagaATCAT gaagtAGAGG aggtggggTA agagatgAAA 240

gaccactgca tgaggataag gaatctaact gagtaaggaa aataagctta agctagttt 300
gctgggaag taaagcctaa gaaagagtaa attaggcaag caaaggcatg agagaagtat 360
aatagcagaa gcatgcttga agaaaaagaa agagattca gaaagggaaag aaaagttagc 420
tatagagaac 430

<210> 4132
<211> 379
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-B12
<400> 4132

cccacgcgtc cggtttcga tgagcttaga ggaagtattc aacaaggcag cggaagaagt 60
aaaaaaaaactg tcttcggcat ccaacgaaga caaactggag ctatatggtt actttaaaca 120
agccaaggag ggtgattgct ccaccgagaa accaaaaggt ctttttaatc aaaaagaaaa 180
agcaaagtgg gacgcctgga attccaaaaa agtatttcc aaagaagaag cacagaaaa 240
gtatatcgaa aaggtcgatc aactatgcgg cacgcgttt cttcaaagcg tttcctagtc 300
accttaggtc cttgctctt tttggttt tcggcctaa ttccaaaaa atatgatcaa 360
agtaccgttt tttccgcc 379

<210> 4133
<211> 235
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-B5
<400> 4133

ctcacgcgtc agcccaggcg tctgccacg cgtccgcggc cacctgggc aaaacatcca 60
agctacgaca ggattcggtg gtggattcag gtttccgat acaccttcct ccaccaatca 120
aggtaacact ggtgacgagg atctctattc gtacgacaac gttcacgaa tctgtgcagt 180
ttattgatgt gtggcggttt gttgaaataa acatttgcgtt agtttacaaa attgg 235

<210> 4134
<211> 368

<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-C8

<400> 4134

atgttattag gaagagaaaag gagtaaggaa gtaaaggaga tgataaatgt gagtgtaa 60
gagagtggag tatggagtgg agagaagagg aagaggagtg taatgaagga ggagataaag 120
ggagagaagg agataaggga gtggagttag ataaggatgg aggaggagat ggtaatgata 180
atagcatgtta tggtagtcca ttggagcaat ttgaagtggg atcgctgtat aagatggaga 240
tagaaggaag gaaaaataggg ataagtaaca taggagtgtta tataataatg ataagtgtaa 300
aaggaaagg aaaggagaga aagagaaaag ggtgaaatg cagagatctc tagagaaagg 360
caaaaacac 368

<210> 4135
<211> 108
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-F6

<400> 4135

attcagatat gatagacggg aaatccgaag tagacgatat ttgggttacc tggaggactt 60
aatcaaggtt gatctagggg tccacttcca gaccttagag tgctggtt 108

<210> 4136
<211> 298
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-022-Q1-E1-G6

<400> 4136

cccacgcgtc cggagagggt aggcttagaa gcagcaaacc agagaggaaa gcgttaaagc 60
atgaaagaaa agaaatccga aaaagaagag aaaaaggtaa gaaagaggac cgaatcaggg 120
taagaggttag aggagcaaga agagaagaga gaatgctggg tggagtagcg aaacaagaga 180
aggaaagtaa aaggttaagaa agagaaaagg tttacgagag aaggaagtag aaagaagaga 240

gtgtaaggcg gcgtcataat agaaatccga aaggagtaga agaaaagaga gagaaatn 298

<210> 4137

<211> 282

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-H1

<400> 4137

attccgaggt cgaccaggc gtccgaccac gcgtacgaac agagtggcta cagagtaagg 60

aacagatagg gaatgtatg gtaataagta aggtaatgtt tggagaaaag atgatacgaa 120

taatgaaatg tggaaatgtt ttaatgttac caatgtatgc agtaataatg atgggtggaa 180

gacaagagag aaagaacgag gatgtaaaggc agcaggagtt aagaagatgg gaggaagtga 240

taagaagaaa ggaatgagga ttcacgtaca gcacgacaac ca 282

<210> 4138

<211> 429

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-H11

<400> 4138

ccgacgcgtc cgaggacgca tgggcggacg cgtggcaag aggagaggac attgaattgt 60

tcatggtcata acaaaggaaa tggtgatgga ataacttctg tttcatttag tcctcggtct 120

ccttagcgta ttgcaactgg ttcgttgaa aagacagtga gagtattcga tgttagagacc 180

ggtaacttt tgcaacaattt tcgtcaacat gcagattctg tatattctgt tgcctttcg 240

agcgatggaa gatatctgtt atcaggttca ctgtataaga atgttatatt atggatctt 300

gcagctcctt ctccaaatga ctgtcaatt ttcaaaggcc atactgactt tgtttgtct 360

gtcgcattta gcttaaacgg tcgtttccc ttgagtgca ccaaagaccg ttacggtaac 420

tttctggga 429

<210> 4139

<211> 284

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-H6

<400> 4139

acggtcaaga attcccggt cgacaaacgc gtccaagcaa agcgagggtgc aaatttacat 60
tcatcaccgc atacatcagt aaacgataga agcattcat cacaatcgga tgcatggtag 120
tgactgaata cagatgttct cgtaagaatc gtggaatcat tcaaagagac tcgaaacgaa 180
atcaagggca tttcagagta tacgaaccag cgaaaataga aaaaattaag gatctagaat 240
gtattaggaa atgctatcga ctaaatgcgt ggcagtgcac atgg 284

<210> 4140

<211> 202

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-A1

<400> 4140

aattcaaaaa gctgtgtttt gcgccttaaa tgaaaaaaaaaaaaaaaaaaaaaaa 60
agaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa aaaaagaaaa 120
aaaaaaaaaaaa aaaaaaaaggg gggaaagcgtc aaaaaaagag aagtgaggaa tgaggaaaag 180
taagggaaag ggagccaaaa ag 202

<210> 4141

<211> 327

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-A12

<400> 4141

gtccagaatt cacgggtcga cgcacgcgtc cgccggacgcg tgggtatgga ttgtatgtt 60
tctctcaaga cgtcgagatg tatcggtggc atttctgcaa tgcaaggcat ttctagtatt 120
tgaacttgcg gagatgtttc gaatggtgaa tgagagtcaa atgttagtgt ccaaccccat 180
tgacgcaata tttccttgta tcgggtttca tattgtactc gctcatcagc tgcatgttga 240
tccatagcat atagcggtttt atctgccaa aacagtaaaa aacttctgtt ccagactcct 300
ttccattgca tttgtcgaa aatatct 327

<210> 4142
<211> 390
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-A2

<400> 4142

tacctctcca acaagggtgtt gcacggctgt cgaaagaacg tgctgtgaag tgagagaacg 60
tacgagaaag ccaagtgagg aaaagaaggc aagtagaggg cggcccgaga aaggagaggg 120
cgtaagacgt gatacagagt aggaagaaaa gagaagagag ctagaaagga ggtaaaagaa 180
gagtaattgg aactgagaaa aggtccaaac aagagaaaatc agcagtgggg aaaattgggc 240
aatgtacagg gaagtatgac ccagtaatga ggagtggagt aaacagaaaa ggaagtaaaa 300
ggagggaatg aagggaaatg atggcaaaaa cacgtgccag cagcagcggt aaaacgtgtg 360
taacaagcgt agacgagaag aactgggtgt 390

<210> 4143
<211> 362
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-A5

<400> 4143

gaaataaacgc acgaaacagg ttttatttcg tcgcactgaa gaactcacaa actcagtgt 60
gagaatccaa tttgtttcca tcacacgaaa atttcagact ctccaaactc tgcattggga 120
tcgaagccac caaaggcagg ctgctcatta aaagaaggcc atgatggata ggatggatat 180
tgagggaaatt ccacatagga tgtgtaaagaa ggagcgtaaa aatagctagg cgaaggat 240
ccctttgagt aatctgcaaa gtctacttga gctgctttc cattgtcctt tcatgaggca 300
ctactagttt cttctaactt ggggatctt gttgtacctg gaataacaga ggcgttgcct 360
ga 362

<210> 4144
<211> 419
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-023-Q1-E1-B12

<400> 4144

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aaaggaaaca acaaggtcaa aagccaaaac tttgccaaat ttccaaacaa acttataccc 120
aacctcaatc ttaaatccaa cccccaacct agggcaaagc tccttcctac aatcaatatt 180
cttcttcgta cggttcctct agctatcgtc tcttaactgc agacgaaaac caacttgtga 240
gcagaggagg ttagtgcacca acaagccaat gtattctagt tcctatccaa tgctgcactg 300
attgcaaaca atgctatgcc gcatggagtt cctaaatact gatacagtgc tcggctagaa 360
agaaacagat atcaacggat gttttttcc tttacgtgaa taanacttgt gttcataac 419

<210> 4145
<211> 440
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-B6

<400> 4145

gcaacaccga ctgttagca aaaacacagc actctgcaga aaagagaaaa tggtaaagtat 60
agagtgtgcg gcctgccaaa tagtagagaa gaaatcgatg aaagtgaaag cgagtaaaag 120
atgaggatata gagaatggcg gtcctaactg taaggatcca aaggtagcga agtaaataga 180
cgtttggaaag gcgtccagta tgaaaggaga aacgagtgtta gcactgtcta gtcgtcgaac 240
tcagcgaaac agcaataact gtgaaaatgc agttaaactag cagtaggacg gaaagacccc 300
ataattcttg actagatacg ttttagggagg agagagaatc atgaagttaga ggacgtgggg 360
taagagatga aagaccactg catgaggata aggaatctaa ctgagtaagg aaaataagct 420
taagcttagtt tggctgggg 440

<210> 4146
<211> 396
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-C10

<400> 4146

gtccagaatc acgggtcgac gcacgcgtcc gcccacgcgt cggccacgc gtccgcccac 60
gcgtccgccc acgcgtccgg aaaaggagtt gtctagtgc aaggaagaag gtttgagtac 120
cgacataaag aaagttggtc aaaagtgggg acgaaatgca aaaggtgaac gttggtatga 180
aacttggaaa gtaaagaata atggaaaggt taaaactacg tatcgtagttag aaagagccaa 240
ttctggcagt tttgaacat aggaacttgg cagctgtgtt gtagtaattt tgaaaatagc 300
tatttcgtt tttgttagaa ttcaaataat atgaataaac gcaaataact acctttcaa 360
atacaaaaaa catccaaatc ccggcaccaa ccctac 396

<210> 4147
<211> 393
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-C3

<400> 4147

cttggcat tgaggatt ggagaatgta gtcattcaaa ttccacttgc taagagtgc 60
ggtactccaa agttacgagg tgctgatgga gagtttctt ttcttcagg aatggtggaa 120
tggaaaatag ctcttgttga taaggataat cctcaagggt cttggagtt tgtaacagaa 180
cctactcctg ctactagttt ctccctgtt caagtgtcct ttacgagtag tgaaatataat 240
ggaaagattt gaatagaatc cgtgaaagat tcgtccgacg aatctcctca caagtttct 300
ttggagaaat gttgactac cgaacgatat tccattgtac atgactgaca gtacagtaaa 360
aagttgatataac aagcgtaaaa cag 393

<210> 4148
<211> 393
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-C4

<400> 4148

atacccggtt caacccacgc gtccgtgacg ttccatcggtt cttgttata caggatgtc 60
cttcttacag atataatgct ctcattcg tcaatgggtt gatgctgggg cactacatca 120
attacttagg accacaacat gactttgtac ttccataatgg aattctgaat cccaatggaa 180

agaatgatat agccatagca gtttggggac aagacattgc tggaggaaga cttggaaacg 240
tgtccctgca tgcgtatcaa gtttaagga cggaacccag aataactgaa attaatgaca 300
gtccaaacta ctggcaaatt cttcctcgac tagaggagct atgtttagtg tttcccgat 360
cgatgttga tggatggat ttcgttcata taa 393

<210> 4149
<211> 445
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-D10

<400> 4149

ccggtaga attaccgggt cgacgcacgc gtccgtactg atatactta gacatgtaaa 60
tactatcggt cctcttaaga ctggctact cttggagac gcaagtattc atatccaaaa 120
cctggagggtt catttcgtac tctttcatgt cctgtcggtt tagttgttac tggcaaccga 180
tcttcaagat gcaactttc cagagactct tgtgagctgt ggacggaaga acgaaacgtg 240
cgttttggta atatcggtgg gtcctttcc acacggctcg tgggtttctt ggatgactct 300
acaatacttt tcgatgttct gctatttagag tggatgttcca cgctgggtt ttgtggatgt 360
cgacgatcca ttggctcagg aaaactttt cgcatttttctt tgataggat cttcgtacgc 420
attctctcggt ggttggatcc caacg 445

<210> 4150
<211> 321
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-D9

<400> 4150

ggccaaacgt ccggagcgac cctccgctgg ctggctgcag gcaaataattc gattcaaagt 60
atgaaagctg gagaaggaga tattactgtt agtcaacttag taaaggaact gttgaagcga 120
aatggagca acgagcaata cagacagatg aacaaaaggt tttgcgcaa tcttggcatt 180
tttgcacacag caatttttgt ttttagaaag tatggagaat tatttgcata ttgaaaagata 240
aatattatcg tgagaaaagaa ataaacgctg ctcctaagtgc cttattggac tgaaaaaaaaa 300

aaaaaaaaaa tgaaaaaaat a

321

<210> 4151
<211> 447
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-G10

<400> 4151

tcagaattca cgggtcgacg cacgcgtccg aagaaacctt tataatgtctg ttttagcacag 60
agaaaaagaaa ttgcacaaggc tcagttggaa gcacaacgta tagctgctgc tgctggaggt 120
ttaagaattc ctggagcagt tcctgggtcc ttgtatcccc aaccaggagc tccaatgttt 180
tatcctcaac caggcgtacc acctcaaattg caacttcaat caaatatgtat gggaaagagga 240
caagcttcgt ttattaaccc gcaatatttg gcaatgatgg gtcaaggagg aggaggagga 300
gcagccgcag cagcagcagc agctgctggc cctgccgcta caggaggagc ggcaatgggt 360
tcgatgaatc aaaactttat aggaagagga actgcagtca tgtccagtcc tggcggtgg 420
ggaagaacctt cgtatcctgc agcttct 447

<210> 4152
<211> 424
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-G8

<400> 4152

cgaccacac gtccgcccac gcgtccgccc acgcgtccgc ggacgcgtgg gggacgcgt 60
gggcacttgt tgaggtagtt acacagcatg tggatggtt gtttcaacct gtcttgaacc 120
cttgcacatcaaaaagacgaa ttggaagcaa gctataacct ttaccagaca gtggagtcaa 180
ctcagtgaat gcaaggaccaa taatatgcga cgattactct gttttacttg cttgggtcag 240
tcgacattat ccgacaacta cggttatccc gagcaaggta tgatgcaaag cctcgtggaa 300
atttgtttaa aaatcaaatc cgtgtagaac acaattatcc tcaacaagtcc cggaccaagt 360
ggaagggaaatt ggtaaaagat gttcatcggtt ggtttgtttaa tgcttgtata cctggaaaga 420
aacc 424

<210> 4153
<211> 404
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-H12

<400> 4153

tcacgcgtcg aaacactgca ctggcattat tcgactcgct cagcagttac ctgtgggtga 60
tgtagaagcg gtcaatttgc tagaagaaaa acagtgtcaa tcttctgcgg attattctgt 120
tccagtttc agaagtcggg atcatgtccg agtctcccta agaccgttc aaattgtctc 180
tcttcaattt cagcttggtt gaagttatca aaatttggttt tttcagtaaa ttgtcttca 240
tttcggaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300
aaaaaaaaaaa taaaaaaaaaa aaaagaaaaa aaaaacaaaa agataaaaac ttaaaataaa 360
aaatacaaaac aaaaacataa aaaaaaaagg ggggggcccc ccaa 404

<210> 4154
<211> 386
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-H4

<400> 4154

gggtcgacgt acgggattta cgtcggggca tttcaaaagc tcaacctaaa caaccaacat 60
ctgaccaaga caacgcttca aaagccaaaa aagccgaaaa acctgcagga atgattcctt 120
ctgcacaaaa agattccaag gccgttgaat ggagcaatag tgaaacaacg tcaaaagagc 180
gtgaaattga aaaaccttta aactgtcctt gtattcacaa aattaaagga aggttcctgt 240
ggtagcagt ttatcgacg atatcgctgt tttcttgaaa gtgaaacaga gccaaaaggt 300
tccgaatgtg ttgaaataatt ttcatcgatg caaaagttt atgtaaaaca ccgggagagt 360
atgacttgga tagtgattcc gatgac 386

<210> 4155
<211> 134
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-H5

<400> 4155

ggaaaaaaagc ccagaagcca agataaggta tcaaagtaaa gaaagaagga aaaggagaag 60
aagagagggt aggcttagaa gcagcaaacc agagaggaaa gcgttaaagc atgaaagaaa 120
agaaaatccga aaaa 134

<210> 4156

<211> 410

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-H6

<400> 4156

cccggtcga cccacgacgt ccgggataag aatagttcct atcataaagc tggagaagaa 60
gaagaagaag aagaaggaag aaagagaacg gaccagcagc aacaatccaa ttccggattgg 120
gacctcattt acggaattga acaagtggac ttgcgaccac cgccagcaga ctgacaagaa 180
gtaaaaacagc aacccaagtt ggagtttaa caaggatgga aaaggacaac gataacagct 240
ggaacgtcga ggataaagac tcggtgagttt tgcagctcgt ttgggtgacc 300
tttccctagt ttttgatttg tattctcagt attccaataa acgtgtgttggaaaggcaaaa 360
acaacgatag cccaatcaca acaaattacg caacctgaat ggcaaattggg 410

<210> 4157

<211> 361

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-H8

<400> 4157

acgagtcgat tttttttgg gtgtgaagag ttgcgcacaaa gagagaaaga gagagaaatg 60
gcaacgacga gtggaaaggagg aggaggaagt ggcgggtggtc ttaccggacc tccaaaacca 120
ccacacctacg cagcaataca agatggaccc cctcctgggt gttatccacc ggtggatgtt 180
cgttagaaact tgcccaaagt tggcccttcc ggtactactt ttttgatagg catcgactg 240
atcaccatct atgggttttgg gggagcgacc aaatcagctc aacgtagaag aagactgaac 300

caggaaaaagt atcaaattcg attggctatt acgccgtatt tacaagccga acaagaccgt 360

t 361

<210> 4158

<211> 421

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-H9

<400> 4158

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ctgttatgca cccaaagaaa ctagagctt tacaaaagag tctagagtac gtaccaagtt 120

gtggatttac agtggatgcc gtgagaaagg cagtagaaaag tcttggttta tcaaaggcag 180

caactggttt attggaacga ggactcgtgg agttggttga atttcatcat tcggttgcag 240

ataaaagggc tgtagattat gcacatcaaa tagcggacaa cgacttgaa aggaaagacg 300

tgatcattgc agcgctacaa agaagatttc agttagcga ggattttcag tcccactgg 360

cgcaagctat ggcgttgaa cacttgccac aaaactggcc ggccgctaca aggcgttgt 420

t 421

<210> 4159

<211> 418

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-A3

<400> 4159

gggtccaggg gtcgagggtc gactcacgac tccgccccacg cgtccgcggaa cgcgtgggtg 60

caagttggtt ggtttctgga cttaaggca tctctgttct cttgttggtg tgactgttgg 120

tagatattgt gaaagatggg agtcaaagtt ggtattaatg gttttggag aattggaagg 180

ctagttctta gagctgctt ggagaaacag tctgttagatg tggtagctat caacgatccc 240

tttattgatt tggactatat ggtctacatg ttcaaataatg actctgtgca cggcgcttat 300

ccaggtacag tggtagcaa gaatggaaaa cttgtcgtgg atggacacga aatggcagtg 360

tttgccttcc gtgaccctag tgagattcct tggcctcta ctggagcaga atatattg 418

<210> 4160
<211> 445
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-A6

<400> 4160

ggtcagaatt accgggtcga gccacgcgtc cgcgtaaacc ggacgattgg gatgatgaag 60
aagacggaga gtgggaacct ccaatgatac caaatcccaa gtgtgaagaa gtgggttgtg 120
gagaatggaa accacctatg attcctaacc ctgcgttacag agggaaagtgg aaggcacctc 180
tcatcgataa tcccaactac aagggtccat ggaagccaag aaagattccc aatccagact 240
actatgaaga tctacaccca tctattcagc caatcggtgc tattgccatt gaaatttgga 300
ctatgaatca aggatttgtc tttgataact ttttgggtga ttttgaccca gaaaacgctg 360
ccaagttgc aaaggaaact ttcgaggtaa aacacaagca tgaagtatct gcagaagaaa 420
aggagttgaa gcgactttcc acaaa 445

<210> 4161
<211> 382
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-B2

<400> 4161

cacttatgac gatatcaagg caacgatgaa agctgcgtca gaaagcaaag cttaaagg 60
aatattggca tataccgaag atatggtagt ttctactgac tttgttcaca atagtcattc 120
ttcgatattt gatgcgaatg ctgaaattat gttgtcggaa acttttgta agctgattgc 180
ttggtagat aatgagtgaa gctactccaa tcgtgttgta gatttggtgc accatatggc 240
gaaagttgat ggtgttagctt aactctgctt ttcttgggtt ttttcgtgt attgtttgtt 300
ttgtgaaaga gatgaaatgt gttgtcttt ccataaaaaag ttgtgtgcgc tgtaaaaaaa 360
aattgaaaaa aaaaaaaaaagg aa 382

<210> 4162
<211> 475

<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-B5

<400> 4162

caggtgccgg tcaggaattc acgggtcgac gcacgcgtcc gcccacgcgt cgcggcacgc 60
gtcccggttac tgaaaatctg tttggagata tattatctga tgaagcttct atgttggttg 120
gttctttagg aatgttacca tctgcttctt taggagaagg caatcgcca ggagtatttg 180
aacctgttca tggtcagct cctgatattg ctggtcagga caaagccaat ccactagctt 240
gtatcttatac tgctgccatg atgctgaagt atcagttca gttggatgaa gcatctcatg 300
ctgtggaaca agctgttac cgagtttag acgaaggata tcgcactttg gatattatgt 360
ctccaggaaa gactttgggtt ggttgtaagc aaatgggaga acacgtattg aaacacttgc 420
aaagcgttc aaacatggcg actagtgctg ctactagtat tcctacaaaa catta 475

<210> 4163
<211> 255
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-C5

<400> 4163

agtaaaaggt aagaaagagg aaaggttac gagagaagga agtagaaaaga agagagtgt 60
aggcggcgta ataataaaaa tccgaaagga gttagaaaaa agagagagaa gaaagaaaaag 120
aagagaaaaaa gcccagaagc caagataagg tatcaaagta aagaaagaag gaaaaggaga 180
agaagagagg gtaggcttag aagcagcaaa ccagagagga aagcgttaaa gcatgaaaga 240
aaagaatcc gaaaa 255

<210> 4164
<211> 432
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-024-Q1-E1-C8

<400> 4164

ggcccaaccc acgcgtccgg taccgtacaa gcgttcagaa gaagaaaaat ggagccaagg 60
aggtaaaaaa agatggcagt tattcaaaag actggaaaaa gagaatgcta ctgcccgtt 120
tttcttacaa aacaaagcta ttttccagg tgctagagtt ttggaactgg cttgtggttc 180
cgagaaaacc actttgcaag tagctgcga agtaagaggc tattctgtac cttagggaga 240
gaccacgggg gaagtggtgg ataaattgtt ggatatatta cgtccatctt atcaccagga 300
aggaaactg gatgggccca gcaatagtgg ttccgttagta ggtgtagata tcgccaagg 360
aatgctgaat gtgttcagag gcangttgga aaatactgtt ttgaaagatc acgtgcaact 420
tgtanaaagt ga 432

<210> 4165
<211> 386
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-C9

<400> 4165

aaaaaaaaaga accaaaaagt tcaaacgtt ccagtcggat aggttaaaaa gagtcaagga 60
aagctggagg aaaccaaagg gaatcgactg cagagtgcgt aggccgttca agggttctac 120
tttcatgccc aagatcggtt atggcacaga taagagaacg agacacttgt tgccaaacgg 180
tttctacaag ttttagtaa ataatgtaa agaattggac gctctactta tttgaaccg 240
caaatatgca gcagaaatag cgcacggagt atccgcaaag aagaggaagg aaattttgga 300
acgagcggcg gagttggata tcagagttac caacgcacgt ggaaagttga gagtcagga 360
agctgaataa aaatcgctta tttact 386

<210> 4166
<211> 486
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-D5

<400> 4166

cgctgcaggt gccggtctag aattcacggg tcgacgcacg cgtccgtat agccctttt 60
tctcttaatt gtttttctc tagttcagct gtccttgcgtat agtactttat ttttacccag 120

gttcaatatg cccaaagctg cgagtaagga agagaagccc gcctcaaaac gcgctgtatc 180
ccccataaac gaatatatga agaagatgct tcccgtcata aagcaacaaa accccaatct 240
ttcgcatcatcg gaagctttta agcgttgtgc tgaaagttgg aaagacgctc cagagaatcc 300
aaagaaccag gcttcagcct aagtttagggg ttttcttga attgggtttt ctcaacacca 360
ccaggagaag gaactagtct attttataat tccctttgtg tcttcaagca cgaaatatga 420
ggagaggtaa acttttgtct tatttggtcc gtatgagtag ttgcgtgtt gttacataaa 480
atcact 486

<210> 4167
<211> 452
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-D7

<400> 4167
aggtaccggt ccagaattcc cggggagaaga caaaaatttt atggaaaagt ttcaaaaact 60
ggagaagatc ggtgaaggca cttatggagt tgtataaaaa gcaaaagaca aatatacagg 120
agaactcggt gcactgaaga agataaggct ggaacacgag gaagaaggag tacttctac 180
agcaattcgc gaaatttcca tattgaagga attgcaacat ccaaacattt tgaggttaagc 240
atggagtgtat gagagttctt tgagtatatt cgttggtagt acttcgagat gtgatccacc 300
tggactccaa actatatctg gtgttcgagt atctggaaaca agattgaaa cattttatgg 360
atagtttacc ccctggaaag cttagaccctc ttctaatcaa atcttatttg tatcagcttc 420
tgaatggttt ggcgtattgt cacgcaaacc gt 452

<210> 4168
<211> 356
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-E11

<400> 4168
gttcagcaact acgttagactc caaagggttt tcttattacg gggttgaagc ctgggtggaaag 60
tggtagctg atgggtgtcc acctcgctt tccaaagagg aagtcgctaa aaggacacgc 120

cagtctggtc agtttggtcg aaaggaccaa ccaagctcac aagacccccc agcttggagg 180
tctatggag aaacttatta tcctgagcga aagagtcaag aaacattaga cgctgaagaa 240
cttcaacaaa ggaagagcat gaataagtcg agttcgaaac gaccaaaaga aaatgttgca 300
gctgcatcat agttgagttt gtttcttatca taaacttattt attcaacgtg aaaaat 356

<210> 4169
<211> 421
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-024-Q1-E1-F10

<400> 4169

accgacacag gtactcgagg agaaaggaga cccaaattaa ggtgagagaa tggacgataa 60
ggaacttaggc aaaaggatat ggtatctgctg gttagaacata tgaaagaagc agcaccgact 120
gttttagcaaa aacacagcac tctgcagaaa agagaaaatg taaagtatag agtgtgcggc 180
.ctgccaata gtagagaaga aatcgatgaa agtggaaagcg agtaaaagat gaggtataga 240
gaatggcggc cctaacggta aggatccaaa ggtagcgaag taaatagacg tttgaaaggc 300
gtccagttatg aaaggagaaaa cgagtgtac actgtcttagt cgtccaaactc agcgaaacag 360
caataactgt gaaaatgcag taaactagca gtangacgga aagaccccat aattcttgac 420
t 421

<210> 4170
<211> 381
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-F12

<400> 4170

ggtaccggtc cagaattccc gggccgaccc acgcgtcaag gaaaggagag aaagaggaaa 60
gggatgaaat gcagagatct ctagagaaaag gcaagaaaaga aaagaaaagga agacacagta 120
aatgaggcga gaaagcatag gaagtggaaac ggatttagaa cccgtgttagt ctatgcagta 180
aaagaaaagaa tgagtaagaa aaaaggaggt cattccacca ggggagtaaa ggcgcaagaa 240
agaaacccaa agcaattgac gggatcgga aaaagggtg gatcacgtaa attaatccga 300

tataaaccga gaaccttacc tctccaagaa ggtgtgcac ggctgtcgaa agaacgtgct 360
gtaaaagaatg gaacaagaac g 381

<210> 4171
<211> 264
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-024-Q1-E1-F2
<400> 4171

cccacaaagca actcgagaag acataactaac tcacctacaa ggagcattta agggtaagcg 60
aaatcgatgg cagttacgga aaaaatatga aagttacgag aaatccgta aattacctgc 120
agggtgcacct agaacaaaga caaacttgta aaagtgaatt tcgattttac tatgcttctc 180
ttttggaaat acaacataat tgtgtgaaag taacttttagc aataaagaaa tcgagttgtg 240
tggaaaaaaaaaaaaa aaca 264

<210> 4172
<211> 482
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-024-Q1-E1-F6
<400> 4172

aggtaaccggc cgagaattcc cggccgacc aacgcttcgg ctccggctgc aggtgaaata 60
gactttcct taaaccctcg atggaaacca tgtgctcagg tataaagaat tcctttctt 120
gataccgatg atgatgttca ttccagtttgc gacgacgatg aacgtcaatc acttcgtgcc 180
aacttttac cccccgcatt cgcacccatc caacttggag cacacgacga taacagtgca 240
gatgactggc aagtgaaaga attgaccgct tcttagtccag tggatccaa tcatccccac 300
ataaagccca gtcatttgcgtt ggttgcttca gaggaaaccc acaaactgctc cagaaagttg 360
ttgataggtg ccaaagtgtt gattgtgcaa gctggatatt caggaaagcg ttttatacat 420
gaaagactga aacaattggg agttgaactg attattcagg actggacata cagttggc 480
cc 482

<210> 4174
<211> 451
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-G10

<400> 4174

agg taccggc caggaattcc cgggctctca atgaaggaag gattggaata agtgctcaga 60
tgactggttt ggctcaaggt gctttgaata ttatcttc ctatttgcattt gaaaggaagc 120
agtttggaca gcgcatttgg aactttcaag gtgttcagtt tcaatatgca gaagccatgg 180
tcaaggtttgg agcagctcggt gccttggat acaatgcctg tcgaaggaat gatgcaggct 240
tttgcattttttt aaaggaagct gctattgcga aatatttttag tgctcaagca gcgaaatgg 300
tagcctcgaa aagcatcgat tgggctggag gtatgggctt tgtgaaggag tttggtttgg 360
aaaagtatta tagagacacc aaaattggtc acatttatga aggaaccgat aatatgcaat 420
tacaaacgat agcaaaagag atgcaaaagg a 451

<210> 4175
<211> 461
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-024-Q1-E1-H3

<400> 4175

aattccggg ccgacccacg cgtccatgaa tataatggaa ggagaatggt aatgtatgga 60
gtaataggag taatgataat gatgacgtta agagggagg gagtaatggg agtacatgta 120
ggaatgtcat gtttagggat aagtagtgta ataataatgg gaataatggg aatgataaat 180
gtggtaagta ggtcatataa aagcatggag tatatggaga ggataagaga agagagtagg 240
gtgtatgttag gaatgagttat aataacagga atgatatgga gtaaagaagt gtggggatca 300
tggtgataa atgatgttagt gaatataagc atgttagtat gctggatatg gttggaaagta 360
atacgaggag taaaagaagga gtacagagga ataataagca gtataggaat aataaatata 420
ccgataataa agtactcagt anagtggtgg aataccttgc a 461

<210> 4176
<211> 399
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-024-Q1-E1-H4

<400> 4176

cgggtcgacc acgcgtccat ttgggtgttt tcttggtagg aattgttagat tccccatggg 60
caaaaaacct aattttaaac ccaaaggggaa aaattccttg ccctggaaa ttccaaattg 120
ctttggatt gaaaaatacc acctataaat acagggttaa caccttggta aaaaacggag 180
gtaaccattt ggaatcgat tatgaaaaac tcaacccaat tcacactgtg ccaactttgg 240
ccttggacgg tcääacaatt gggcattcat ttgccattat ggagtacttg gaaaagaccc 300
ggccacaatt gcccttgtta ccaaaggacc cggttcagcg agcaaaagtt cgtcaggtan 360
tanaaacagt aaatgcggat acacaaccac tgcaaaatt 399

<210> 4177
<211> 449
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-024-Q1-E1-H5

<400> 4177

ggtctaaaat taccgggtcg acgcacgcgt ccgcggacac gtgggaaaga gaagagagaa 60
tgctgggtgg agtagcgaaa caagagaagg gaagtaaaag gtaagaaaga gaaaaaggttt 120
acgagagaag gaagtanaaa gaagagagtg taaggcggcg tcataataga aatccgaaag 180
gagtagaaga aaagagagag aagaaagaaa agaagagaaa agccgtactg aagaccgaca 240
caggtactcg aggagaaaagg agacccaaat taaggtgaga gaatggacga taaggaacta 300
ngcaaaagga tatggtatct gcggtagaac atatgaaaga agcagcaccc actgtttagc 360
aaaaacacag cactctgcag aaaagagaaa atgtaaagta tagagtgtgc ggctgcca 420
atagtagaga agaaatcgat gaaagtgaa 449

<210> 4178

<211> 295

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-H8

<400> 4178

tcttggagc attgtacat tcaacatcat caaatgccaa agggagggaaa gaaagattct 60
tcaaagaaag aagccacaag taaacctgca gcagcagatg ctacaaagac gacagaaaag 120
tctggtccgg aagccaagtt gaagggact ggtcaaaga aacaataaaa agttgactat 180
gcatgtgcag tcctgttatg ttttgtgagt tctgtttgat agttccagc tattctttg 240
gtagtgaata aagagaaaat ttttatatt taaaaaaaaag gaaataaaaag gaggg 295

<210> 4179

<211> 346

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-A7

<400> 4179

tacaacaccc tatagtgagt cgtattaatg acgcatgtcg gaagtgttgc gagcagagaa 60
agatttggaaa cgccgccttg agttggatcc ttccaatgtt gcattgaaga aaaagatgcg 120

cgaacttcgc caagttaagg ccgaacaaga tgcaaaggat cgcaggttat ttggaaatac 180
gtgtcacgt ttaggacaaa ttgaagacga tattcataag aaatcaaacg aagaaaccaa 240
ggccaaagaa atcaactgcct ctgaatgagc tcaactttt ttacttgagc ttaccataga 300
aagaggatct aacatgttgt ttttagtttca acacagacaa gagacc 346

<210> 4180

<211> 425

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-A9

<400> 4180

acaataccct agagttagtc gtatgaatat cgtagtgaagc tcgacagcgt ctctacacaa 60
acacgcaagg tttcttggcg gaaaaactt gcgactacta gggtcgttac tttaaagaga 120
aatgtgagag cactggtcaa gttttagtgg acttgtgagg gtattgctta tgagagccaa 180
cctgtggtgt cagttgttta tctggcgttta gaggaagacg tgtgaaagga gagcttcct 240
ttatcggaca aggcaagg accgaaaaaa cacttgcac aacctgactc gatTTTactg 300
atagatattc cgttcggttt tttttgtatt gctcgtcaag tcttgaacag agctggttt 360
tatattttga tgacaaacag gacgagtttcc ttggttttt aagtaacttt tccgtctcca 420
aaact 425

<210> 4181

<211> 417

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-B10

<400> 4181

caatatccct atagttagtc gtatttatatg ccaactcgat taaaacacag tagaaagaag 60
agaggacacg tttctgcagg tcatggaaga gtaggaaagc acagggaaaca ccctggagga 120
cgagggaaacg caggtggcca acatcaccat cgaactttat ttgacaagta tcatcccgt 180
tatTTTggaa aattgggtat gcgatggttc catttgcaaa gaaatacact ttattgtcct 240
attatcaacg tcgatcgact gtggtcactt gtacctgaaa aagagagaga gcaaccgata 300

aagaaaatgc aagcaatagt agtggatgt a gtgaaggc acg gttttataa a gttgttgggg 360

aaaggcaagt taccgcgaca accgttgata gtgaaagcca gattctttc gaaatta 417

<210> 4182

<211> 377

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-B12

<400> 4182

caataactcta taatgagtcg tattaacgcg tccgcccacg cgtccggaga ctcactcatt 60

ttctctttgt tttgtctttt gtagctgttt tcctcgtagc tcatgcagtt cccgttggag 120

aagatgcatt cagttcagt cagactttg gaaatgcttc tgcttcaggc aacgcctctg 180

ttattccagc tacaaccaag atccccaaat tagaagtaac tagtagtgcc tcatcaaagg 240

acaatggaaa agcagctcaa gtagacttg cagattactc aaaggatata ctttcgccta 300

gctattttta cgctccttcc tacacatcct atgtgaaatt tcctcaatat ccattcataac 360

catcatgggc ttcttt 377

<210> 4183

<211> 130

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-026-Q1-E1-B5

<400> 4183

tatagtgagt cgtattatna ttaataaaaa aaaaaaaaaata taagtaaaca aaaaaaataa 60

aaaaaaaaaaa aaaaaaaaaaa aaaactatta aaataaaaca aaaaaataact aatggaaagg 120

gggttcgggt 130

<210> 4184

<211> 437

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-B7

<400> 4184

acaataacct atagtgagtc gtattacgac gctagtttt tgtgttctca ttcgatggat 60
aatacgatac gtatttggga tgttcgtcct ttcttcaag gttctgatga ggaacgttgt 120
ctaactattc taagagggtgc ttcccattct ttcaacgta acttgttgcg gtgtcgttt 180
tcttcagatg ggactcttgt cggtgcagga agtgcggata agtttgata tatttgggac 240
gtggatagtg gagagttgca atatgctta cctggtcacg atggtagcgt caatgacttg 300
gctttccatc ccaaagagtc tcttattgca agtgcaggta gcgataaaac tatttatatt 360
ggagaaaatac aaaagactga ataagttaaa attcgtattc acaatattat ctataaatat 420
aggaaaatga agcaacg 437

<210> 4185
<211> 370
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-C7

<400> 4185

ctatagtgag tcgttattaac gcgtggggc cgcatctcggt cgacggcctg acgagcatgg 60
cagcagcggt agatctactt tcttagaggca cagcgatgtg tgacaagtgg aaaatgaaga 120
gaatcacgac gcttggaggcg caagagaaga tggatgagac agcgttccaa gtatcgagg 180
aattcctcggt acgtctgatt tgaggagagt tcctaaaacg tggatgagct ctttgcaaa 240
ctctggcgca gtgagtatac cctgctacgg aaggttggaa ttgtttccga ggattgttcg 300
caagttatga tataagggttc ttgtggttt tggatcacc ttggaaaact cagtctagag 360
aggaaaagagg 370

<210> 4186
<211> 312
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-D10

<400> 4186

acgcgtccgt aaggatgttt tcttggtagc agttgtacat tcaacatcat caaatgccaa 60
agggaggaaaa gaaagattct tcaaagaaaag aagccacaag taaacctgca gcagcagatg 120

ctacaagac gacagaaaag tctggccgg aagccaagtt gaaggaaact ggtgcaaaga 180
aacaataaaa agttgactat gcatgtcag tcctgttatg ttttgtgagt tctgtttgat 240
agtttccagc tatttttg gtagtgaata aagagaaaat ttttatatt taaaaaaaaa 300
aaaccgagac ca 312

<210> 4187
<211> 451
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-D8

<400> 4187

tagagtgagt cgtatttagtt gtatgtggaa accgcatttg tctgcatttc tcataaacca 60
accgtcgatc ctacctgcag ttttatccac taggaatcca ttcgttgttc gtcgacgttt 120
gttgcaaaca actttgttt tcaaaggatc atcttcgtac ggagatatgg gttcacctac 180
tgcacccacc aaaaaccttg tggtcgacag acccaagtcc atgaactatg aagcagtctt 240
ggactttta ttgcaaaaga atgagcagtt tcaacgaggt ttccaaacag gtactatTTT 300
agaacacgaa acgttacctg aatatcgcca agcgttggca caagggtggac agaaacctat 360
tgctacgata gtgacgtgtt gtgactctcg cgtcatcccga aagcaatct ttcaacaagg 420
gtttggcaaa ctgtttacgg taagaacagc a 451

<210> 4188
<211> 393
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-D9

<400> 4188

tacaataactc tatactgagt cgtattaaga ggaccgaatc aggtaagag gtagaggacc 60
aagacgagaa gagagaatgc tgggtggatt agcgaatcaa gagaaggaa gtaaaaggta 120
agaaagagga aaggTTTACG agagaaggaa gtagaaagag gagagtgtaa ggcggcgtca 180
taatagaaat ccgaaaggag tagaagaaaa tagagacaag aaacaaaaga agaggaaagc 240
cgtactgaaa acggacacag gtactcgagg agaaaggaga cccagattaa ggtgagagaa 300

tggacgagta ggaactacgc agaaggatat ggtatctgtc gtagaacata tgatagaagc 360

agcacacctact gtttagcaaa aacaaaacac tct 393

<210> 4189

<211> 280

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-E11

<400> 4189

ctcttagagt attcatatga tgacttattg gtttacgcgc aactcgaact ttttaagacg 60

caaagccata tctatttta gtattgtggg atttgtctgg ttaggagcca tctgcattggc 120

gattatcgga gcgtgggcct aagaataaaa tttgttgag acgtcgtggt gcagatgact 180

cgcattttg gtagttgggtt caagtttgac aagagaaaaac atttgttgct acttcttaca 240

aataaaaaaag ttcaaggaca aattgttagat aaaacaaaaat 280

<210> 4190

<211> 327

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-026-Q1-E1-E12

<400> 4190

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ttgccanaac atacggaagc ggtgacaaat ggggactatt tgctagtcatttccctata 120

gagtgggtta tcagtgttagt gcagcgtatc gtgagatagt gattcctcga ggacttataa 180

gagaccctaa cttaaaaatg actagaaaatg gtaaagccgt atacgttggaa 240

actaaatgtt acttttgggtt gctacgacat ttctgaaatg aataaaaagcc ttttgcagtc 300

ttttcaacgc aaaaaaaaaata aaaagaaa 327

<210> 4191

<211> 435

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-E7
<400> 4191

tacaatacac tatagtgagt cgtaatatcg tttgacgttg gtgcctcatt aagccatcg 60
tgaactacat ctttatctc ttagcacaaa cacaattaa agaacaatgc gtgaggttat 120
ttctctacat attggtaag caggtttca agtagcaaac tcttgctggg aactttattg 180
tttagagcat ggtgtcaacg ctgatgaaac cattgataaa aaggaaaca cagcaaacga 240
agaagctttt ggtaccttct ttacccagac aagctcgaaa cgatatgttc ctcgttgtgt 300
atttgcac ttggAACCTT ctgtcgtaga tgaagttcg accgggcct accggccatct 360
ctatcatcca gaacaactta tttccggcaa agaagatgct gcaaacaatt atgcaagagg 420
acattatact attgg 435

<210> 4192
<211> 104
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-E9
<400> 4192

tacaattctc tatagtgagt cgtattaacg cgtggcgaa cgcgtggaa aaagaaaaag 60
aacaaagcaa aaagaaaata caaatataaa aaaactgaaa aaga 104

<210> 4193
<211> 435
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-F9
<400> 4193

cacgcgtctg tagaaatcca tgaaagtcaa agcgagtaaa agatgaggta tagagaatgg 60
cggtcctaac ggtaaggatc caaaggtagc gaagtaataa gacgttgaa agggtccag 120
tatgaaagga gaaacgagtg tagcactgtc tagtcgtcca actcagcga acagcaataa 180
ctgtgaaaat gcagtaaact agcagtagga cgaaaagacc ccataattct tgactagata 240
gttttaggaa ggagagagaa tcatgaagta gaggaggtgg ggtaagagat gaaagaccac 300

tgcatgagga taaggaatct aactgagtaa ggaaaataag cttaagctag tttggctggg 360
gaagtaaaggc ctaagaaaga gtaaattagg caagcaaagg catgagagaa gtataataac 420
agaagcatgc ttgag 435

<210> 4194
<211> 352
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-026-Q1-E1-H3

<400> 4194

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ggcgcccaaa ataaagatca aaagtaccaa ataataaacg ttttgaaggc tccagtatga 120
aaggagaaac gagtgtagca ctgtctagtc gtccaaactca gcgaaacagc aataactgtg 180
aaatgcagt aaactagcag taggacggaa agaccccata attcttgact agataggttt 240
agggaggaga gagaatcatg aagtanagga ggtgggtaa gagatgaaag accactgcat 300
gangataagg aatctaactg agtaaggaaa ataagcttaa gctattttgg ct 352

<210> 4195
<211> 308
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-H5

<400> 4195

tacacgcac tacaaagggtt cgtcattaac aggagctttg caatgcggat aaagatgtac 60
tggaagagac tttaggatcg aacaatgcga agatcttcca tgattttgtc catgcaactg 120
caccaaattt gtacgaagga caatttaaat aggaatttta tgacttattt tgttgtttgc 180
aacgaaaaag ataaagagtg acttgcaagc taaaaaaaaa aaacacacaa aaaaaaaaaa 240
accacaaaca caaaaaaaaaa aaaccaacac acaaccaaaaa caacacaaca acacaaaaaa 300
aaacaaaa 308

<210> 4196
<211> 405

<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-H7

<400> 4196

cacgcacccg ccagcggtc cgccccacgca tccgcaagta tactgttctg ccaacgtttg 60
tccacacttg ggaacaccat tggatcaagg aacggtatct agtggtaact tgatatgtgc 120
tcagcataag acttcttggaa ggctatccga tgaaaaactt gctggaaagt ggtgtcctta 180
tccacccatc ttggggccgc tggtggaaa gttgaaagct cctcaagact tgacggtctt 240
tccagtcaga gaaatgaacg gttttattga ggctcttatt gacttggatg ctgctaaaga 300
gtttgaaagt aactattgga gaggaatatt ggacgctcaa ggtaaagcta ctgggtggata 360
ttattaaata gcttgcctt aataaagttt ctgctggatt gttgg 405

<210> 4197
<211> 322
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-H9

<400> 4197

ccacgctgtc cgcgaaatgt cctatttcag ctcaagggtt tctatcctgt ttctcttcca 60
cagacaacaa agtcgagact gttgtgcattt ttactgtgtt gcctccttgc ctaccaatgc 120
ttatttgcgg tagaatcttc gagcaatgcg tctttagtca gctcaatgtat aatactgtgc 180
tattagaatg aactgcacca aagcacgttta tacttagtaa ctatgttattt tgtccagcgg 240
aataatttta tctgtgttgc actttagtca atgaaaacac ctagagtcgt gttaaaaaaa 300
aaaaaaaaac aaaacagaaaa at 322

<210> 4198
<211> 308
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-027-Q1-E1-B12

<400> 4198

gaagactgga ccaaggaaaa gtatcaaatt cgattggcta ttacgccgtt tttacaagcc 60

gaacaggacc gtttggaaagt gaaagagacg catcgctcgtc ttcgtcaaga agcagaactt 120
atgacggatg tgcctgaata tcaaccggga gaaaatttgt acaaaacaag agagtttact 180
ccctatgtca aaccgctagt acctggagtt ggcccacaag gactttgaaa gttatctaaa 240
gtgatggttg ccaataaagc tggaatggag tttagtttg tgcaaaaagaa aggtatgcat 300
aaaccaac 308

<210> 4199

<211> 281

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-028-Q1-E1-C5

<400> 4199

gcgtccgggc gttcagtatg aaaggagaaa cgagtgttagc actgtctagt cgtcaaactc 60
agcgaaacag caataactgt gaaaatgcat taaactagca ttaggacgga aagaccccat 120
aattcttgac tagataggtt tagggaggag agagaatcat gaagtagagg aggtgggta 180
agagatgaaa gaccactgca tgaggataag gaatctaact gagtaacgac aataagctt 240
agctagtttgcgtggaaag taaagcctaa gaaagagtaa a 281

<210> 4200

<211> 275

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-028-Q1-E1-E10

<400> 4200

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cttggccggt tggcactgtt ggcagtggga ggcttcttc ctcacatgtt tctcactcat 120
caaggtgtgg tggacaact aactcatttt cgttcggtgc ctgttggtgg gggtgcttga 180
ggtatgtgtg tggatgtgtt tggatgtttc tggatgtggaaat aataatgcag ttggaccatc 240
gaaataaaaat gaaatgtttga catataaaaaa acaac 275

<210> 4201

<211> 373
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-028-Q1-E1-E4

<400> 4201

tttcctcac ttggcttct cgtacgttct ctcacttcac agcacgttct ttcgacagcc 60
gtgcaccacc ttcttgaga ggtaagggttc tcggtttaat cggttaatt tacgtgatcc 120
agccctttt ccgattcacf tcaattgctt tgggttctt tcttgcgcct ttactcccct 180
ggtggaaatga ctcactttt tcttactcat tcttctttt actgcataca ctacacgggt 240
tcctaattcg tttcacttcc tatgcttct cgcctcattt actgtgtcat cctttcattt 300
cttcctgccc tttctctaca catctccgca tttcatcgct ttcctccttc ttcctttcc 360
cttcactttt aca 373

<210> 4202
<211> 167
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-028-Q1-E1-H3

<400> 4202

agagggaaaa ctgtttatt gaaagacacg tatttctttg gttgtacaaa cgttaactgg 60
catggatatt tctaacgttg tccctacttc aactacgcag aggacgtact tttccctgg 120
ccatggata gcatgcatcc acttgtttt gtccacgctc tatgcac 167

<210> 4203
<211> 451
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-A12

<400> 4203

ccacgcgtcc gcaagaccga gggttggaac ggaatcgaat ttaagttgcc ttgttttgt 60
cccggtggaa cattgcaagg tttccatgaa tatttaaat gtcctcctca gtgaaaaat 120
attttagtcaa ttggctacc tatgtgacca tcaaaaaggagg ggatataacg aaagagcaag 180

ttgacgctat agtcaatgca gccaatgaac aactgacggt aggtggaggt gtaagtggag 240
ctattcatat agctgcaggt ccaaaatata cggaaggcctg tttaaaggtt cacgatgtaa 300
tacggggagt tcggtgcccg actggagaag ccagaatagt gacaggaggg cagttaccag 360
ctccatatgt catcaatact gtgggacctg tttattctag tgttccaaat cctgcagagt 420
tgttggaaatc ctgttacaga tctgtttgc a 451

<210> 4204
<211> 514
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-029-Q1-E1-A8

<400> 4204

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tggattttcc tgggagagag agagagaaaag agcgggaaaa aaagagagag agtgtccctc 120
ctccttgtgt gtcgggttttgc gggggaaaac aactgctccc tgtggctatt ttctgtgttt 180
gtcagatcct aaggtggacg ctgcgttc cattcctgac gttttaaaat atacaaagca 240
aaacggggaa ctagacgcta ctccctatat agaagaatac aatactttt atcagcacgg 300
ctacgagtcc atagaagata gacaactaag gcagtcacag aaagcaaaag aatgtatatc 360
tagttttat aaccttagtat cggacttttgc tgaatatggg tgggcaacag agttttcact 420
ttgcttattt acaaaagaat gaacctctgg cgtgtggatt gttacgctat gaatacgtgc 480
ttccgtggag gatgaaagta cancgta taga 514

<210> 4205
<211> 456
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-B10

<400> 4205

gtccacccag cgcgtccgca cacgcgacccg cccacgcgtc cgccccacgcg tccgctcctc 60
ctcaagttgg tttctcgagg attatttcct tgcaccctaa atattacttt tatatacaac 120
ctataacatg gagcacaagt ccaaaatgtg tagtaaagaa acaaaagtca accaactttc 180

gacatacatg gatatgggt gataatcata gctctcgcc aaagagcaat cgtttcata 240
tttggtaaa gtccttgaca actggacgca tatttcatcg ttcaagtggg ggtactggg 300
ctgttggtgg tgaaatgggt ggaggtagtg gaggtgggaa aagtagtgca ggagggaaagg 360
gaaaagggtgg tgccatcct ctcttgctt tctggatgcg ttacaatcga ctgttagagt 420
cgcgccctt attgaccaaa gcacttactt ccttga 456

<210> 4206
<211> 323
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-B11

<400> 4206

ttccgaggc cacccacgca tccgcattt atcacgtgaa aggctatcca gttgataatt 60
ctggaaaatc tgcaatgtat tgatatgtga taagaatggc aaggcttcag ttcccttcta 120
tatactgagt ggaaacaaggc taggtatcaa ccccaaagggt tggaatacac ccaacgcttc 180
tcgcaagggg tccaatgttt tactgataat aatgcctgaa aactcaaaat gtttggg 240
tcaaaggaca agcttcttat gaaaacgtaa aacctcctcc ataaaagcaa cttcgacaa 300
aaaaaaaaaaaa aaaaatccaa aaa 323

<210> 4207
<211> 324
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-029-Q1-E1-C10

<400> 4207

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caccttttc caactttatg atagaatctt atcggttggg gaggcggtt acaaagccag 120
accgtanaga attcctcaag actgccggag caactgcagt cgggttctg gttatgggat 180
tcattggctt ttcgtgcgc ttaatacata tacccataaa caacatcctt ttgagctaaa 240
aagatggaca cgttgggttg ttggactcgt tttgtcttct cattcttgg gacgttttat 300

cgaaaaaacgc tgggtttctt aaaa

324

<210> 4208

<211> 458

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-C11

<400> 4208

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gggagaagaa atacgacacctt ttccttcttc tgggtggga attttctctt ggtacgaaaa 120

tactccaaaa caaagagcag acaccgctgt tgtaattgcc tcaagactat gtctctttat 180

aacaagaata tactggatcg attcaagttt gatggaaaaaa tagctctcgt tacaggtgca 240

gctcaaggaa tagggaaaagc actagccatt gcgcgtcaggc aggcaggagc tgctgctgta 300

ggtttattgg acttggagtc tgagactctt cgtcatacgg aaaaggagct caacgcccac 360

ttttcttcca ctcaaattt ggctttggta gcagtaagga aggatatcaa ccactgtgtt 420

gtgtactttt gaagagattt ttttattttt aaacactg 458

<210> 4209

<211> 456

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-C12

<400> 4209

gtccacccac gcgtccggca aagtatgaat acaggtggtg ctgagaattt ttcaccagcg 60

gatatacaaa attaatgaa gcaaaaactt caggaactca aaacaactat tgagatagtt 120

caagaacaat ttcgagaccc aacccgcacc actttcatct gtgttacgt agcagaagct 180

catttttat atgaaacgga gcgtcttgc cagcaactag cttttacga gatggactgt 240

agaaatattt ttgtcaacca gttattcgac ccacaggagg aacaaaagag tgaggcgcta 300

ttgatcccgcg cttagaatgca acaaaagtat tttagatcaag tgcaccaact ctattccggc 360

gaaatgtgcc tcattaaagc gcctttctg cctgaggaat tgaacggttt ggaacaactt 420

gaaaagttcg ccaactacct gaaacttgaa gagcat 456

<210> 4210
<211> 540
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-C5

<400> 4210

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tggagcttaa taagggttct tcgtcggAAC gaccatcgaa cgagtatcca aaccacacat 120
cgcaagatcc taaaacattt cgctctcata ttgccatgc caagttacag actgaacaaa 180
caaagcgaaa agtgaaagaa attcaagaga aaatggctcg gttacgttagc gagaagaaaag 240
tgcttcagga tcaaatacg tcgtacgata ctgaaattca acaaattcgg tcgcagctta 300
gtgatgaaca agctaattac tatgtggaaa cttccctttt cccgaatgaa atggaaagtc 360
gtcgaatgga tggaggagac aagattagca acaagaagag tatcaacaaa ggaacggaga 420
gtcttccttc ttctgaacct acaacggagg acttgccacc tccgcatct tatgacgaaa 480
ttgttggttc cgcaagtccct ccgaccaact ctcaaggcaa gtcagcaagt cctccaacct 540

<210> 4211
<211> 448
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-D11

<400> 4211

tccacccacg cgtccgcaca cgcgtacgga agaaaatggc tccaaaaggt gcaaagagt 60
ttcctgttgc aggcaagaaa ccaatcacca aaagtataa aaagtccaaa aagaagaggt 120
cagagtccctt tgctatcgac atttacaagg tcttgaagca agtgcacccg gatactggca 180
tatcctccaa ggcgtatgagc atcatgaact ccttggaa cgatataattt gaacgtattt 240
ccagtgaagc tagtaaactt gcagcttattt ccaagacgaa gactttgact tctcgtgaaa 300
tacagactgc tgtacgtctg ttgctccctg gataactcgc caagcatgca gtttcggaaag 360
gtacgaaagc agtaacaaag tacacttctt cgtataacgt actttgaaca tatgggtttt 420
gtcaacacacct ttttggag gacttgtc 448

<210> 4212
<211> 452
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-D12

<400> 4212

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ctgcccgcac tattcctgga agagaaaatg gtggcaactg cgatatcaaa aacttgagtc 120
gaggaagtag agtttacttg cctgtgttg ttccaggagc aaactttcg ataggagacc 180
ttcattttag tcaaggagat ggcgaagtat cgtttgtgg tgcgattgaa atgtcggtt 240
atgcaattct tcggtgtcaa atcattcgcc aaggaatgga ccgttacttg agtccgatgg 300
gaccaaccaa actacatgtg aatcctatct tcgaagttgg acctttggag ccgagatatt 360
cggaatattt ggtatttcaa ggtgttcgg tggatgagta cggcagacaa cattatttgg 420
atgcatccgt tgccctacaaa cgagccgtgt tg 452

<210> 4213
<211> 434
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-E9

<400> 4213

ttccaggtcc acccacgcgt ccgaaagatt aaacggaata caactggcct cggtctactc 60
ccgcctaaca actaccttca caaggaagct cttttgagg ctggtaact tctaaaaaac 120
atgtgtttta acgggataac gttgtatttgc atgacttttgc tggatgatggaa 180
caccaatcc tttaacaagg agcacaagag tagaaattat ccggcgggct tgtaagataa 240
tttctgttgc caaaaagaat cttgtgttag caagtgtccg ctggatggaa ggaaaagaag 300
gttttcttag aaatatattt agagaaaaat cttgttccat attcccttac tctcgatata 360
tcaagttctt ccaagttcta ccgtcaagag ggaaaattca agggaaactg agcactacgg 420
ttttgtttgtt caaa 434

<210> 4214

<211> 464
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-G2

<400> 4214

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gagaatgaaa taagagcatg gaacaacaac aagatgctcg aaaggtaacct ccaggctatg 120
tatttgtgaa aagttccgat gggtttgagt ttatattac cgaagaatgt gccaaagtgt 180
ccaagttct gaaaactacg ttggaaagtg gttctccga ggccaagacc ggacagttgg 240
tactcaacga aatacctggg cgtttattgg aaaaagtatg tgaatacttt tattataata 300
taatgcacca acaaaccgac gaaaacttgc ctcccttcga gttccctcca gaaatagcgg 360
tagaactact tatggttgcc aactttctgg acacctagaa atgcttgcca cctagaagag 420
taagcaactc aagtatatat aaatatgtgc aacaaccttt ccac 464

<210> 4215
<211> 558
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-G5

<400> 4215

ggaataccgg gatcgaccac gcgtccgcgg acgcgtgggt gctgctgcaa cggcagtgca 60
cctttgcaaa ctttcgttg tagcgcgtac agtagaaata ggcgcataatt tgtacttggc 120
aacacttata ccacagctat gagtattaaa agtacactga aagttacttt tgtaaccgga 180
aaccaaaaata aactggaaga agtacgatca atactagcgg gactagataa gtttggata 240
gagggcaagc acattgatct tccagaattt caaggcgaac cagaagatat cgccaaagag 300
aatgcagac tagccgccaa agcagttggc ggtcctgttc tagtagaaga tacttggta 360
tgcttcaatg cttaaaagg cttaccggga ctttatatca agtggttct acagaaactt 420
ggtcacgatg gcctcaatcg actttatat gttttgagg ataagacggc ttatgcttt 480
tgtacttttgcgttggc gtagcaccga gtgatgcagt tgtgcttgcgttggacag 540
acggtatcat tgtacctg 558

<210> 4216
<211> 436
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-G9

<400> 4216

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aagattgacg acatgcca aa gaacaaagga aaaggaggga agaatcgtcg tcgaggaaag 120
aacgacaatg aagaagaaaa gcgggaactt gtgataaaag aagagggcc agaardatgcg 180
caagtgactc gcatgttggg aaacggacgg tgtgaagctt tatgtttcga cggtaactcga 240
aggctatgcc atattcgagg gaagatgaga aagaaggaaa ggattaatgc cggagatatt 300
gttttaattt gcttgagaga ctatcaagac gaaaaagccg atattatact aaagtataat 360
ccagatgaag ctagagcatt gaagtctcaa ggagaaattc cagacaccac gaaaatcaac 420
gaagaagacg gtgaag 436

<210> 4217
<211> 461
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-A10

<400> 4217

ttccgggtcg accacgcgtc cgaccgtgca tgcgtgttcc tcgtcgtgct cctcctggcc 60
gccatcgccg tggcacccgtt cgccggcgcc gcacgcgtgg acgttgtgga gggtaggtcc 120
atggcatccg ccgatgcacc ggaggccggc gccgatgctc ccgctcctag ccccgactcc 180
gcctcatccc cagactcgtc atcggaggcg ccctctagca gcagttcctc cgactagacg 240
caaaaacctc ttcatcttctt ggaataacta acatgtata cgttgacccc tgatgtata 300
gaaacatgta cgtgcattcag tgtatggaaat gcgagtgcc aacacatgga atgtgcttgc 360
ctaattatttgc ttatatttctt tatttattat atgtctctc ctgtttttttt ttatatttgc 420
taatgcaagt aatataattt gttataccca atatataatag a 461

<210> 4218

<211> 426
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-030-Q1-E1-B12

<400> 4218

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tgggccgtcg atcccgaaaa ccataccgggt ccaatccgat tcagccaacc gctgtgaatg 120
atggcgctaa acctgttccc accagaccgg cgccggccgtg gcggccggcac cggccggcacc 180
acgagcggcc gtcgtcgccgg cgccggccac ggccgcacgc tcggccgtcg tcgctgcggc 240
ggccaccgtg gcgcgcgcgc ccgcgtcgccgc gcccccccccc gctccggcgc tccagctgca 300
gacgatgacg gtggacccgg ccccccgcga agcgccccgac gcggtaatc cggatctcg 360
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cgagct 426

<210> 4219
<211> 234
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-B2

<400> 4219

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gacttgcta gtggaggcccg cttctgagga tgcatactaa attgcctgtc aattagaagt 180
cctacatctt cgatagtgc ctctctcatg acttcgagtc atttcttgat aaat 234

<210> 4220
<211> 444
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-B5

<400> 4220

taccggtcag taaaattcccg ggtccaccca cgcgtccgc aacgcgtccg cggtgattgt 60

| | |
|---|-----|
| taaattatgg cgaccatga tcaagtggta gcgtacaagc gttcagaaga agaaaaatgg | 120 |
| agccaagcag gtgaaaaaaag atggcagttt ttcaaaagac tggaaaaaga gaatgctact | 180 |
| gcccgcgtttt tcttacaaaa caaagctatt tttccagggtg ctagagtttt ggaactggct | 240 |
| tgtggttccg gagaaaaccac tttgcaagta gctgcgaaag taagaggcta ttctgtacct | 300 |
| tcaggagaga ccacggggga agtgtggat aaattgttgg atatattacg tccatcttat | 360 |
| caccaggaag ggaaactgga tggtgccagc aatagtggtt cggttagtagg tgttagatatc | 420 |
| gccaaaggaa tqctqaatqt qtcc | 444 |

<210> 4221
<211> 450
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-B6

<400> 4221

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atcacaacca gcagataccg tactttccaa aatcaatcaa gtaaagaccg agggttctac 120
tgcaaaggca atcggttacga ttatgaaaca actcggtgtt cgaaggctgt tcttaggaac 180
aggacctcgt tgtttgcgttgg ttggatggtt gactgcaggt caattcttca tctatgatta 240
tgtgaaacaa cttcttggca tcttccccac ccaacaaaagt gcgcccaaga caattgctgc 300
aaagggtctaa aaatttttaac taatgtaaaga tggatggaaa acagactttg ttttcctgaa 360
aatgggttca gttgaactca ttcctgtgtt cttcggtgtt tgtttggaaat gtttgtcatg 420
ggatcatttt cagcatggtg acatttttc 450

<210> 4222
<211> 478
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-B7

<400> . 4222

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gcatcttttg ttggcttac tggtccaact gtcacacatg ataataagga gactcgtaat 120
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acctgttgtg cacataccag atatggctt ggacgagtac tttccttcg gaatcataat 180
aggggacctt gcgtggaatc tagacgaccc atatcacaag gcaggctaaa taacttgacc 240
atgatgccca ttggtgttcc caaggtagct taccgtgttc ctggtgctcc tcaagcagat 300
tgggtagata tttacaatcg actctatcgc gaacgtatta tattcttagg acaagagatt 360
gacgacgaga tttcaaacca aatcatagca gtaatgctct atttagactc tgaagataat 420
accaaggcta tatatctta tatcaactct cctgaggggt tccgttattg ccggtttg 478

<210> 4223

<211> 464

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-B8

<400> 4223

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atattcttg tgcttgaca atggttgcaa agactgctct gagttgcctc tttcgcttt 120
tccttagcgc tgccgcagtt gcagccgacg tagttcaga ggagagatgg ggatatgctc 180
agcaatccca acagcagcaa cagtccaaac aagtatgtaa acagtatgca tactatcaga 240
gtccagtcg cacttccgta accacacaga tcccatactg gacccaatgc tcgaagactg 300
tgcaaacctt tgtcccaagc cagtgcagta ctatcacca atctcctaca tggacctatt 360
gcagcaccta caccaccact agcgtaccat ctcaatgcag caaggccgtg actacttata 420
ctcataacctg ctgtgcttat gcccaacaaa cttcctatgc agtc 464

<210> 4224

<211> 350

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-C10

<400> 4224

ttaggacaa ccaatttgc gtgaatttga gctaaaaaat gtaatttaca tttgatctct 60
ctctctgctc taccgctaca gcagcaggca caagacgcag actgcttagg ggtcacaagg 120
cttacagttt catccccacg aacaaatagg aagcggtctg tgcccggtac gcctgacaaa 180

taagtttac acccttgc aactacaggc ttgttcgggtt agctctcaat ccatgtgaat 240
tgaatgagat tggatgtgtt tgaatcgaa acaagttaaa cttcttctta atttttcca 300
atctcatcca atccatatgt tttagaaata accgaacaag gatttggtgt 350

<210> 4225
<211> 413
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-C2

<400> 4225

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gacaaaaccc aaagataacct cttccacaac ttgtccgcta aaagatacac tgtttactaa 120
aaggatatt tttattgtgc taatactaac ttttttatct tttctcacaa ggttttatag 180
actagctgaa ccacctgcag tggatttga tgaggtccac tttggtaat ttgtgacttg 240
gtactttaca ggagaatact atttgatat tcatccacca cttggaaagc ttattctgta 300
tattggcggc gtacttgaa aatataaacc aggtttctc tttgacgcta taggagcgg 360
atatggagaa acaaagttt atgtttacg ttgtgttgca gcaatattg gaa 413

<210> 4226
<211> 434
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-C5

<400> 4226

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ttgctcgctg tggagaagaa atgaaacaac gtcatgctgc aacagacaac agtgggacta 120
gttattggac acgttttagaa gccttggta agcaatactt gccaaactcg caagtttca 180
aggtttaag aacgttgaa cgaaaacaca tatcttttgt tgacaatctt tctattgacg 240
agatgaaaca actcttgaga gggaaacgt aaagaagtgg agaaagatat taggtggagt 300
gtccttaggtg acgtggagg aattgtgtt ttgattttgt ttgtgtgtat tcaatgtata 360
agcaagcaat aaatagttt ttcctacaaa aaaaaaaatt cacatgcgtc atgtacccgt 420

caaaaaaaatt gcaa 434

<210> 4227
<211> 376
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-C6

<400> 4227

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acaagttgtc acgagatatg aaaaaggac aatgtcgttt ttggaaatat gctgtatTTT 120
aaaacattgg cttagagctag tttcgaatac taaaaagtag ttgtaaaaaa aaaaaaaaaaa 180
aaaagaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa gaaaaaaaaa aaaaaaaaaa 240
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaagacaaaa aaaaaaaaaac 300
aaaaaaaaacgc actacatgaa atgaaaatga aaggggggggc gcccctcagg atgtcacttt 360
ttacgagtgg gggaaa 376

<210> 4228
<211> 445
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-D1

<400> 4228

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tatTTTGCCTG TTTAAAGCT aggtattat ttatgtcctg tgatgttttG gtactagtct 120
ttttcgatgc ttttagttga gtgaatggct ctattgacac ctaagggtgc agttttgtc 180
cattctctac atactaaact gccaaacttgt gcaagtacac aaaaaatata catatgttta 240
tacagacccc cagcttcag gatgaggta atgattgaaa aggaatcatg aaaagcaaag 300
gagtagtgga catgttagaga aagcacttga aaaagtagtc acgttcttgt acttgtctat 360
gtgtacaacatgttttgc ttgaagaggt tacaagtttgc ttgtactcga caagcttcc 420
acgtgtcgga cagtgcctt aagca 445

<210> 4229
<211> 389
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-D10

<400> 4229

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ctcaacaaca gccagctcgc gaaaataatg aagagccgca gcatggcatc atcggccgcg 120
ctcttggtgc tagccctcgc gctagtggcg gccaccgccc cacatgtgc ggaggcaaag 180
aagaggagag cggcgagag cggcgaggcg gcggaggcg agaagatcca ggacgacttc 240
tgctcgacgc tgtgcgaggg caagaagggg acggacctgg tcgtgtgcaa ggagtcctgc 300
gcgcctctccc agcagtccaa cctggtgctg tacggcagga tccagtgcaa tggcaagtgc 360
accgagcaga atggcatcac ggccggc 389

<210> 4230
<211> 318
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-D3

<400> 4230

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aattggaaag gttggttcga ttcttggaca agcaaacgtg aatatatcgt ttatgacgct 120
cggaagacac ttaccttcaa agatggcaat ggtattgctt ggtttgata atgaaccaga 180
ttcttctact attgaaagga taagagttga gctgagtctt gaaagaaaac cgataacttt 240
agatctggat ggtcaacatg actgacattt ctctgtgtt gacataaaag ccgttagttg 300
tagcataaat aattctac 318

<210> 4231
<211> 442
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-030-Q1-E1-D4

<400> 4231

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cgtgaggac tgaaaagtga tggaaaac tccttgc gggcaacaga agcacaccgg 120
tgagtatgag agtaaatcga cccacacata ggaccaggaa cttagctgat tgatatgtgt 180
gatggagtgg aaattgcgtc taggacttg atagattcag atggttcaa tgctggatt 240
gctttccaa ctggatgcgc catgaatcat gtggctgctc attagacgcc caatgctgga 300
gatgacacag tggtagatta tcgagatgtg atggacttg actttggaat acatgtcaat 360
ggccatagca tatactctgg acgtaacaat gcgtttgatc ccatatagga cagtttatta 420
ctggcagtga tgaaaactac ga 442

<210> 4232
<211> 481
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-D5

<400> 4232

gtaccggtca gacacttccg gggcaccca cgcgtccggc ctttattct ttagtttgc 60
cacagatgga gcctgtgcta caagaaatac aagtcgatga gccttttc cagttatttc 120
ctggatgac taaacaagaa attgtcaatc gagctttat ggttaaaaaa gaagctatgg 180
agaaggagtc ccctcatcga tgcgttgaag gtctttctt cttgaaagaa acgttataca 240
gaaatagctt taactccgaa gctttccaa aagataagct accgaatctt cgtatatttg 300
aagttggttc ttgtttgga gtggcttttc gtaagctggt tcttgcgtt gcttctcggt 360
ccaatgtctt tggttgtat gttccggaa ctttgcgtt gcttggatac aaattttttg 420
acgataagtc tacctttggt gaacgttagtc gtctgttgcgtt gacaattttc 480
a 481

<210> 4233
<211> 148
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-D6

<400> 4233

accggtcatg acattccggg gtcaccacg tcgtccagag gcgtatgcgt caggcattcc 60
ttgttgacac cgattcgaa tctacgtcac tcttcaacaa ccacttgcc tcataatcga 120
ccagttacac cgtcgctaca cattgtca 148

<210> 4234

<211> 476

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-D7

<400> 4234

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cgatgtcatt gaaccaaggc agtgaatcga gttcagcaag tgattatgac ggcggtgata 120
agtgtataga taataatggt atgcaaggag gaggagaatg taaagaacct agtgttgcag 180
aaaccaagtt tcctcgctgg aaagacactg ccaagagaat aagagatgtc gtcatattc 240
ctctgatatac aggtcttatg attggtagttag gaacggtggt tggaaagacgg ttaggacagg 300
cgtggttcta ttcaaaggat gatgcgtatg tttccaagtg agacagtaac tgtaagtaag 360
gatatatggc agttgccctg tgaggcagcg agcgagcga tgagtgagcg ggccgcgcgc 420
cgtcttctt tttttcctt tttggggg aaagacacag agagagagag agagag 476

<210> 4235

<211> 290

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-030-Q1-E1-E3

<400> 4235

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agagcgaatt cttagtcatta atcaaaaatg aaaccaagtg cttgttcagg tagataaaga 120
tttggagacc tggaaatgat atggcaaaga tattgtacaa gtaaaccaga taatacgaag 180
atatatgcgc aaactgaata ttacacagtc ttgatTTTaatataaaca ggagaatatt 240
atttcctccc aaaaaaaaaa acaactaaaa aatatggaaa aatcgaaaac 290

<210> 4236
<211> 450
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-030-Q1-E1-E4

<400> 4236

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agacacagac tatggcgatg gatacgcttat cgttgttgcgttgcgtat gtccatttt 120
tatcccaaca caaaagttt attaccacca accctttt tgcgtggat gtaaaacacc 180
gcatttgcgc catgagacaa cgaaaccagg caccatgg tcgttgtcc atcgcttcac 240
ggtttgga acaacaagaa ccatccaata agcacctagg acaagattt gccgttcaa 300
cagacctatt gcagtccgac tcgagtgaga acttgaaagg gtttattaaa acgagaggtt 360
gtttgactcc tgatgtgccg tttgtatccc ggtggtaaga aaagacacaa gagagagaga 420
gagagaanaa aaaattgtgt ccactgaaga 450

<210> 4237
<211> 467
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-E6

<400> 4237

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ataggagtaa tgataatgtat gacgttaaga gggaaaggag taatggagtaatgtat 120
atgtcatggtaggtt tagggataag tagtgtaata ataatggaa taatggaaat gataaatgt 180
gtaagtaggtt catataaaag catggatgtat atgtaaaggtt ctatgtatgtat agtaagtgt 240
aaaggaaag gaaaggagag aaagaggaaa gggatgaaat gcagagatct ctatagaaag 300
gcaagaaagaa aaagaaagga agacacagta aatgaggcga gaaagcataa gaagtgaaac 360
ggattatgaa cccgtgtatgtt ctatgcgtatgtt aaagaaagaa tgagtaagag aaaaggaggtt 420
cattccacca cgggagtaaa ggccgcacgac agaaacccaa agcaatt 467

<210> 4238
<211> 389
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-E7

<400> 4238

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aacagggaaag cctagcgaa ctattgagac aactttggc cactgccact ccaactgcca 120
cagagatacc tctgccaact gaagctccag ttccaactga agctccaatt gttacagtaa 180
gaccgattgg tactgcagtt cctataggga caccacttgt gtcacgggct ccacgttcca 240
caacagtttc caggaatacg tttcttcgg aacaaattgc tgccctgttc cagcatctag 300
tacattaaga ctttagcta atctcaccat ctttgtagt accaagattc taggtttgcc 360
caagtgacca gcacatcgaa gtgtggaca 389

<210> 4239
<211> 417
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-E8

<400> 4239

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gtgtgcctcg tgaaaatccc gatccttgtt gttatgcaa gttgcaacga gctttcata 120
gcaacgacat tcattttgt aagttacaag tggcgtggtg aataaggaat gcagtccaat 180
aatactggta caacattgcc taccgaaata ttgacggat ccgacgaatt agttcgtgga 240
gagtatgaag acctgagtgg gcccttgata gaccaaaccg ggtcaaaacta tttcttgag 300
aatctcgagt acattcggag aacattagct ggatgagaaaa ccacaaattg aagagaatct 360
tcgacacacctt tgtgatgact gtcattgttg tgtgggttcc acgacaggag gaacagg 417

<210> 4240
<211> 385
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-E9

<400> 4240

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cacggatctg gcgtctctgg tcagccctct ccctctcctt ccccgccca gtgccgggtgc 180
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gcagcgcgac tggtaacttga tgagcaccgc gggtgccggg ccggaggacc ccgcctactt 300
gcacttgtcg gtggcggcgg ggcatccgga taacgaggac ccacagcagt ggtccccgag 360
gcgacgaccg tctccgtgcc ccgag 385

<210> 4241

<211> 365

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-030-Q1-E1-F11

<400> 4241

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gtcctcttct gcatcgtgca tggtgagaag gaagagtcaa agggcatcga tgcgaaagcg 120
tccgggcctg gtgggtcctt cgacatcacc aagttggcg cctccggcaa tggcaagaca 180
gacagcacga aggctgtgca ngaggcatgg gcatcggcgt gcggcggcac tgggaagcag 240
acaatcctca tacccaaggg cgacttcctt gtcggacaac tcaacttcac aggcccttgc 300
aaggcgacg tgaccatcca ggtggatggc aatctgctgg cgaccacgga cctaagccag 360
tacaa 365

<210> 4242

<211> 475

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-F5

<400> 4242

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aaccaatcct actcctgctg catcggttacc aagtaataat ggtgcagatg atggattggc 120
atccatttat ggcgagtaca atgcaggtag ccaaccaact agcgatacag tcgagtcttg 180
ggatacagga aatgatagtc cgcaaggtaa tgccgataca gagtcgaatt tcaaaagaga 240
gtcgcaccga cgaagaagaa gaagaaatga actgcgtaaa agtagtgaac agagcacatc 300
cacggaaacc gatccaaccg aacaaggaac tatccatgca gataccaaag atttgctttc 360
aagtgcgtcaa gatacagatg tggatgtggag ttcttcttca tcggacaaga catttcggc 420
aactgcgttt tagtgttgc aagcagacga gtccaaaagc acaaacattc gaccg 475

<210> 4243

<211> 142

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-F6

<400> 4243

gtgtttatccatggctat gaagttccg tagaccctgt ctctttgtgt cactgtccat 60
acgattgtgt ttctccggg ggaattatttgcctttctcaa ctcatggat ttcatgacac 120
acactgagca tgggtgtcat cg 142

<210> 4244

<211> 376

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-F8

<400> 4244

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ttacagtcgg gatagaaata gaacaactag gaacggtttataatgtatgtg tgggttgc 120
taaagcaaac ttacttgcgtttt cactgagaaa aaaaaaaaaaaaaaaa aaaaaaaaaaaa 180
aaaaaaaaaaaaaaa aaaaaaaaaaaaaaaa aaaaaaaaaaaaaaaa aaaaaaaaaaaa 240
ataaaaaaaaaaaaaaaa aaaaaaaaaaaaaaaa aagaccatca atgaaaatag ttcaagactg 300
agaaatacgt gtctgaacat aacaaaatcc atctacaaaa caaaataaat ttcaccatct 360
ggatttaata acaaaa 376

<210> 4245
<211> 474
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-F9

<400> 4245

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ggggagccgc ggcggtggcg gagatctgca tgaagactcc gtccccgac ctgtgcacca 180
ggacggcggg gaagcacgccc aacaagtaca aggtggtgg a cgccgtgacg gtgctagaga 240
tgcaggtgg a cgccgttcaag aagcgcgtga aggccggcg gaggctcgcc aaggaggagg 300
tcaagacggc cgccgacgccc gaggcgcgg a gggcgctgaa cctctgcaag acctactacc 360
tggacgcccgc cgacaacctc ggccgcctgca agcgcgc cat cggcttccgc gacgcccgtc 420
acatccgcgc cacgatgagc atggtggcg aggacacgca gaactgcgac gagg 474

<210> 4246
<211> 418
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-G3

<400> 4246

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gcagcaacaa caacactact cgttggtgt ctcttgggtt gtttatgt aagggttagcc 120
atggcaacc accgtggaga agactttatc acgttgggg aaccagtgc acgtttgagc 180
gtgtcctcgt attctaacgg g cgtcaagta tgtgccaatg caggtccctt tgataatgc 240
agtctggaga ttgaatacac gcaacttgcc aataacaagg tatctgtcaa gctttgttct 300
tctgttgtt gagaaccttc atcaccctcg tacacaacgc cttgagaga gtgctctgg 360
aaaaagaaga gataaagaga cttctcggtt ccattccca aaaaaaaaaaag aaagaagg 418

<210> 4247
<211> 486

<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-030-Q1-E1-G6

<400> 4247

taccggtcca gaattcgcgg gtccacccac gcgtccgcac acgcgtccgc ggacgcgtgg 60
gcaagagaag tcagcagtgg gaaaaattgg gcaatgtaca gggaaagtatg acccagtaat 120
gaggagtgga gtaaaacagaa aaggaagtaa aaggagggaa tgaaggaaag ttatggcaa 180
aacacgtgcc agcagcagcg gtaaaacgtg ttagcaagc gtagagcaga agaactgggt 240
gtaaaaggctcg agtagtagag taagtgtaaa agggaaagga aaggagagaa agaggaaagg 300
gatgaaatgc agagatctct agagaaaggc aagaaagaaa agaaaggaag acacagtaaa 360
tgaggcgaga aagcatagga agtgaardcg attaggaacc cgtgtagtct atgcagtaaa 420
agaaagaatg agtaaganaa aagggagtca ttcccacagg ggagtaaagg cgcaagaaag 480
aaacca 486

<210> 4248
<211> 464
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-030-Q1-E1-H1

<400> 4248

cctgccgcgt accggccgtt attcncggg gtactaactg ggagagtata acaagggttt 60
gtaaaaggttg gagatgaagt agaaattgtt ggtttcgta aggaacctt aaagacgacg 120
gtcattggag tgaaaacatt taaaaagtcg ttggatcgtg gtcaagcagg agacaatgtt 180
ggttgttat tgcgtggagt gaaacggaa gaggttcgtc gaggtcaaat tctatgtaaa 240
ccaggttcta tcaagccaca taagaagttt gaagcacaaa tgtacgtttt gaaaaaggaa 300
gaaggaggtc gtcatactgc attctttcc aaatatcgcc cgcagttttt ctgttgtact 360
gcagatgtt cagggactgt gacacttcca gatggagtgg agatggctat gccaggagat 420
aatcttacta gtattacgga gttgttgaa cctgttgcca tgga 464

<210> 4249
<211> 307
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-H11

<400> 4249

ggggccaccc acgcgtccgg agataccaa tccgcctgaa tggaaaggga agttggccta 60
tataattaaa gaaacagggg caattgcaag gtttgggaag cacaagtttag tttcaacaac 120
caaaaacatcc actatgatgg ttgccgtacg tggctctgtt tattcacctg gacagtctgc 180
aacttctcct gcccatcatg cttaccaagg ggctgtaaca agctggccct tgtcgagatc 240
tgcttcttc attgcaagtc caaggtggcc aggtcattca agttatgcac aagttattgt 300
tcctcct 307

<210> 4250
<211> 388
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-030-Q1-E1-H3

<400> 4250

accggtccgt atttcncggg gccacccacg cgtccgaatt gaccttctt tgcgcatattgc 60
cgccctgaaag tcgaagcaag tgggcgaagc gcatgaaaga aattatttag cctgggtggcg 120
agttagtaac agtagtttt ccgattggtg actacgaggg tggacacctt tatgcaatga 180
gtcttgaact ctacaaggcag ttttagagc cgctaggctt cgagagctt tatatgaaga 240
acataagtga tcaacttcca cctagttcca tttcggtcg ctggaaactc tgtcagtaga 300
atggaaatca tattgaagtg aaagttaatt tcttctgttt tggtggttgt ttcgtctcat 360
tagaaaaact agagtgactc catctccc 388

<210> 4251
<211> 471
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-030-Q1-E1-H5

<400> 4251

taccggtcag acattcccg gtccacccac gcgtccgaaa cgattggagc attggctgtc 60
gcattgaaat tggcatccac cgaagaattc aaaggctatac aacaacaagt attaaagaat 120
gcaaaacact tagttccaa gttacaagaa agaggttatac atttggttag tggtggcaca 180
gataatcatt ttagtttgtt agacattcg tcttagtgaa tggatggagc cagagctgaa 240
aaagtattgg aaatgatttc agtggcagta aataagaata cggttcctgg tgataaaaagt 300
gctttactc ccggaggtat tcgaatgggt actcatgcga tgacatctcg tggattggtg 360
gagaaagact ttgatcaggt agcagaattt gtcgataagg gagttgcgtt ggcagcaaag 420
attaagaaga attcagggtc cacactcaaa gactttanag atgctctcca g 471

<210> 4252

<211> 350

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-H9

<400> 4252

acgcgtccga agtgaatcac tcgttgattt gttgttagtac gaacagaaaa cggaccacaa 60
aaaactcgag gatgggagga agatcatcat cacaaggacg tttttgttag atgtatatgt 120
tgcttagctt attttctcg ctgtgtgtaa gggcttctat gccctgccc a tgtacatgtt 180
tggcttcttg ccccatggaa tatacaaagc tcatttcgct ctaaaaaaaaaaaaaaaa 240
aaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaag aaaacaaaaaa 300
aaaaaaaaaaa aaaaaaaaaaaa caaaaaaaaaa gggggggccg cccaaaaggt 350

<210> 4253

<211> 306

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-031-Q1-E1-A1

<400> 4253

ccccacgcgtc cgagatgcat tgctagccgt tggtcgaatg agctgcgtcg accctactac 60

tcatggaact cgtacttana ggtatgaact ttttatatta cctacatata tggatcgaga 120
tatctatatg tacgcttatt cacatgcact ccgaatggtg tatggcacct cgaaattctg 180
ccgaacgtag tcagtttgtt aagaagctct taacagttt cggtaagcgt aaaagangcg 240
cacggggtcg ctgggcatta atttctgaca atcgtacacg tggaattgca ggtttgctg 300
cagact 306

<210> 4254

<211> 413

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-A12

<400> 4254

ccacgcgtcc gcattgcagg tgtttagctt acttttata gtcttgttgt ttggatacaa 60
aaatttgtat acaagtccca gtccgaagaa gagaaaaagca agcaacatag attactttat 120
agaagctgcc aatccgagga ttggtcata aacacctttt attcaccagt gttttttaa 180
cgacaacctg tcaaatgccc cttctgtata ttcagtcagt aaatcttcgt taactaggca 240
taatcccaac tttttgtatc acttatggac ggagtcagag gcagaagaac ttatcaacag 300
gttttatccc ggtcttcaac aagtatggag gaaattcaac gagtcgtttg ttttacgagt 360
agactttttt aggtatattt tgttgcactt tttggtgga gtttatgctg aca 413

<210> 4255

<211> 352

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-A4

<400> 4255

cgggtccacc cacgcgtccg atcatttccc cttttgttt gtttatcggt tgtaaagtt 60
tggttgtttt cttggtagca gttgtacatt caacatcatc aaatgccaaa gggaggaaag 120
aaagattctt caaagaaaga agccacaagt aaacctgcag cagcagatgc tacaagacg 180
acagaaaaagt ctggtccgga agccaagttg aaggaaactg gtgcaaagaa acaataaaaa 240
gttgactatg catgtgcagt cctgttatgt tttgtgagtt ctgtttgata gtttccagct 300

attctttgg tagtgaataa agagaaaatt ttttatattt aaaattgcac ag 352

<210> 4256
<211> 457
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-A5

<400> 4256

ggccaccca cgcgtccgct cttgtggcgt gtgaagttt gtttaccttg aaataatgca 60
gatatttgc aagacactta caggcaagac tataactctt gaagtggagc cttcagatac 120
tattgagaac gtcaagtcca agataacaaga caaggaagga attcctccag accagcaacg 180
tttgcattt gctggaaagc aactagaaga tggtcgtact ctgcagact ataatattca 240
aaaggagtct acccttcact tggattgcg ttgtgggggt ggaatgcaga tatttgc 300
gacacttaca ggcaagacta taactcttgc agtggagcct tcagatacta ttgagaacgt 360
caagtccaag atacaagaca aggaaggaat tcctccagac cagcaacgtt tgatatttgc 420
tggaaagcaa ctgcgtactcc ttcagac 457

<210> 4257
<211> 467
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-A7

<400> 4257

atccccgggt ccacccacgc gtccgcccac gcgtccgcaa cggcctatc agttgagacg 60
taagacgggtt gccaaggact gcaacgaaca cgactgttgg gttattgtaa atggaaaagt 120
gtacgacgtg acgttatttt tggataaaca tcctggtgga aaggagctt tggtagctt 180
tgcaggagag gatgctacag cagctctaga gggtgcttgaa ggtcacgagc acagcaaata 240
tgcttacaag ttgcttgagg agtatttattt gggaaagctc tcttcgagtg aagaggaaag 300
ctcgaaggtg gaaagaattt ggctgttga cagcgacaag gggctggc aagtagttga 360
cgtagataac ctggtcgact ttaagaagcc tttgttgctt caaattggaa ggctcggaga 420
gctgtacgat gtctgggtac actcattcc aacaacggac catacag 467

<210> 4258
<211> 441
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-A8

<400> 4258

taccggatcg acattccgg gtccacccac gcgtccgcac acgcgtccgg ttgcgaagcg 60
ttgtcgttat cgtctatggc ggtattgaa agtgatatacg ttggtcctgc aattcacttt 120
acgaaaaagt ataattcaag gaggcgctac aaggagtgc a tttcgtgctt tagtgcttcg 180
ggtgtgtaaac cagggtggtt ctggacat aagccgaaaa ttactcgcaa cgggctatac 240
gactgataag ggtatgaaga ccaataatgg tgctgttcga gaaagtgact tttacgagag 300
agtctttca agaatagctt caaagcgctc tgactttgg aaagaagttt ctgtAACCTT 360
aataatctct accaatgaca ccgaatccga taaaggtaat tcaatgtgga acgcgtttgt 420
taccaaagac cgtcagttgt t 441

<210> 4259
<211> 130
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-B12

<400> 4259

ccacgcgtcc gcacacgcgt ccgcataaaaa ggagtcgcaa ccattaaaaa agaaaaaaaaa 60
aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaataaaaaaa ataaaataaa 120
aatagggggg 130

<210> 4260
<211> 440
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-031-Q1-E1-B2

<400> 4260

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cagcactctg cagaaaagag aanatgtana gtatagagtg tgcggcctgc canatagtag 120
agaagaaatc gatgaaagtg aaagcgagta aaagatgagg tatanagaat ggcggtccta 180
acggtaaagga tccaaaggta gcgaagtaaa tagacgttg aaaggcgtcc agtatgaaag 240
gagaaacgag tgttagcactg tctagtcgtc caactcagcg aaacagcaat aactgtgaaa 300
atgcagtaaa ctagcagtag gacggaaaga ccccataatt cttagactaga taggtttagg 360
gaggagagag aatcatgaag tagaggaggt gggtaagag atgaaagacc actgcatgag 420
gataaggaat ctaactgagt 440

<210> 4261
<211> 444
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-B4

<400> 4261

cggtccgaca ttcccggtc cacccacgctg tccggagaag gaagaagcag agagggacta 60
tgagcgagaa ggtggatagt cgagaggaa aaagcccaga agccaagata aggtatcaaa 120
gtaaagaaag aaggaaaagg agaagaagag agggtaggct tagaagcagc aaaccagaga 180
ggaaagcggtt aaagcatgaa agaaaagaaa tccgaaaaag aagaaaaaaa ggtaagaaag 240
aggaccgaat caggtaaga ggtagaggag caagaagaga agagagaatg ctgggtggag 300
tagcgaaca agagaaggaa agtaaaaggt aagaaagagg aaaggttac gagagaagga 360
agtagaaaaga agagagtgt aaggcggtc ataatagaaa tccgaaagga gtagaagaaa 420
agagagagaa gaaagaaaag aaga 444

<210> 4262
<211> 389
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-B5

<400> 4262

ccccacgac cccccacgac gtcaggctag agaagagggt cgtatggcag ctctttagg 60
attcatcgaa ggtAACGACC CGGAAATTGT AAAAATAGCT GTGGATGCAA TTCTGGATCT 120

tacgagccat ccagataatg cggaagtatt aagatcagag cgcggctag taccagcact 180
aaaagcccta gtcaccgact ttgatacaac agaggttgc acaaggcaat ctgcgcatgc 240
ttgttggtt aacttgttgg tcagaaattc agccgataac aacgccttg tcgctgaaga 300
attggcatcg tggcgatca gaggtggttt aggtgaaag gatgcgttg actcatccat 360
ctcttcttcc attctaaagc ccacagctc 389

<210> 4263

<211> 399

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-B7

<400> 4263

ttcgcgggtc cacccacgac tccggacgac gtccgcatgt gttccaccg caatcacatg 60
tgaagcgctc ggtttcaagg tccctacaaa ggggcttacc ctatgtata ataatacgac 120
catgtacgac aaacacggag tctgtcctct gcagtcctca aggacgagaa cgttcctgag 180
gatcacgccc atgagttgc aagactattcg tccacagcca gtgttcaactg attctacaaa 240
agtacatcggtt catccctgtta actacgggtt catgcaggc atactctacc tacaggatac 300
gtattgcaca ccctaggaca atttgataaa agttctacgt ccccatggc tttcgacaaa 360
ctttccccca catccgaaag tgctgctcca cgaaaacaa 399

<210> 4264

<211> 439

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-C1

<400> 4264

gggtccaccc acgcgtccga gtttatcttgc tcgtcgacgc cgattggagg cttttcttc 60
cttgcgtcat catggtatcc aaaagttaggg acgtacgtcg gagactaaaa gaaagggcgg 120
caagggaaaga agcccagttg aagaccatgt ctgataagcc atcgaagcca aagatgaagt 180
ggtacccgac ggaagacaaa ccgagaaagc tattttacg gaaaaaaccg caaaagcgta 240
ccaagttgcg ggcattccatc acccctggga cagtcttgcat cctcttgcgttcc 300

gaggaaggag ggtttatctt ctgaaacagc tcgcaagtgg actattattt gtcgacaggac 360
cttttaggtt gaatggcggtt cctctgcgaa gagtaaatca gcgttatgtc attgcaactt 420
caaccaaggt ggatatcca 439

<210> 4265
<211> 459
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-C10
<400> 4265

ggggccaccc acgcgtccgg atttctgtcg tccatcgtgg tagaatgagt aatcggttc 60
caaaaagagtg gcaagaagaa gtttcccaag tattgtttga taaagtaact atacaaaaga 120
gaattggtga actaggaaa caattaagtg ccgactatca aagtcgtaaa cccgttctcc 180
tcgggttatt aactggctcc tttgtttct tagctgactt gattcgggct atgacttgc 240
acctggagat acggttatg agagccattt ctataaagg aacggagagc acaggaaacg 300
ttaccatcga gggatttagag tttctgaata ttgagtcacg tgatgttatt cttgtcgaag 360
atattgtaga tactggtctc actttaaagt ggattgtga caagttggag gagttaaaaa 420
ccaagtcact caaaaatttgg accttttgg tcaaaaaga 459

<210> 4266
<211> 358
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-C3
<400> 4266

gggtccacgc acgcgtccgc acacacgtcc gcaccaactt gtccgaatat acgggtcagt 60
tgatcagtcg agagtggat attcaggaag taactggcgt atgtaagaca gtaacggaa 120
caggagttgt tggtcagcag ccgataatgg agccaggtga aacctttaga tacgcttcca 180
aatgtcctgt tcgagttcct tcgttcttg atccgtcgaa ggacaagttt gtgggctcaa 240
tgcaaggaaa atatatttgc attcgaggtg aagttggtga agaagcattt gaagttaaga 300
ttgctcggtt tggttttat ttgaactttt cttgataaac tgtatagttat ttcataagg 358

<210> 4267
<211> 413
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-C5

<400> 4267

atccccgggt ccacccacgc gtccgaaaca atcagtctga taagagcact ttgaaagaag 60
cgaggagaaa gctgcagagt gcagttcata ctggaacaga gaaaagttct caggtgtta 120
gacgtcaa ggaaactgtg acggagaaat acaaggaatg gacagcgcca aaaagtagcc 180
aagaagaagc aaaagaaaaaa gcacaagaag cgaaagaaga ggctaataaa gctttaatg 240
ctatgaaaga aagtgcgagt gccgcttcag aggctgcattt agagaaagca gaaaaaatta 300
agcaggattt gaaggagtga agatacacag tagtttctc ctatagtgtt ttttagtagta 360
tctgtagtga tatttgtctc gtgatgaata aaacacgggtt attcgatattt cag 413

<210> 4268
<211> 357
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-C7

<400> 4268

gtaccgatcc agaattcccg ggtccaccca cgcgtccggc aaatacggtc attccggcat 60
acgtaccaat tatcgaacgt agaaaggata tgtcatatac agaacaagag aaacgatggc 120
agcagcttcg tagaggaaga tacgtggagt ttaatttggt ttatgatcga ggaaccgtgt 180
ttggtctcaa aacggggcggt cgtattgaaa gtatggat gtcgttacct ctaactgcac 240
gttggaaata cgatcatcat cctgaagaaa attcaagaga agctcaacta gttcaagttt 300
tgagagagcc taaaagaatgg atatgagggt gcaatggcaa caatgaaagt ctcttgt 357

<210> 4269
<211> 255
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-C9

<400> 4269

gggtccaccc acgcgaccgc acgttgtccc gttcgtgtt ggatttcaac tcgtacacac 60
acacatacat atatatatga ataaaaaatg ctgcaaggaa aaaaaaaaaa aaaaagaaaa 120
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaggaga aaaaaaaaaa 180
aaaaaaaaaa caaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa gaaaaaaaaa 240
aaaaaaaaagtg aaaac 255

<210> 4270

<211> 444

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-D1

<400> 4270

gggtccaccc acgcgtccgt ggtgtgtttt ttgcgggtga aagagagaga gcaaaaagta 60
ttggagtgtt gtaaaatgtc aagtttctt actcgagcag cttgttcatt gcgtggtg 120
atacaacaa cacaaaacca gtggaccaac aatggagtag caaggagact ttatcacgaa 180
aaagtagtcg accattatga aaacccaagg aatttaggtt cgctagataa aaacgacaaa 240
tatgtggaa caggtctagt gggtgccccct gcctgtggag atgtcatgaa gttgcaaata 300
cgagtagatg agacaggaa aatagttagaa agtaggttca agacattgg ttgtggttca 360
gctatacgctt catcttctta tgcaaccgag ttgattcgag gaaaaacctt ggaagaagcg 420
agtaaaatta agaataagga aatt 444

<210> 4271

<211> 465

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-D10

<400> 4271

gggtccaccc acgcgtccgc acacgcgtcc gcccacgcgt ccgctcgccg tcgtccgtgc 60
agtatttcat tttgttacat cacctaaaga aaacaaaaga gagaatataat aaatgggtcg 120
agtgagaacg aaaacagtaa aaaagtcggc ccgagtgtatc agcgaggaat actattccaa 180

gctgactctg gactttcaaa cgaacacaag aatatgcgt gaagtagcac tcattccttc 240
caaacgactg cgcaataaga ttgcagggtt cgtaacgcac ttgatgaaac gtatccaaaa 300
aggacctgtt cgtggatat ctcttatact acatgaagaa gagcgtgaaa gaagaatgga 360
ctttgttcca gaagtttcag ctatagatgt gggtaagtc aagatcgatc cagtgaccaa 420
aaatatgttg gaaccgttgg gttataaaaa tcctccgaat gtgg 465

<210> 4272
<211> 431
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-D12

<400> 4272

ggggccaccc acgcgtccgc acacgcgtcc gcccacgcgt ccgcccacgc gtccgcaacg 60
ctcttccttg ccatgaaata ttcgaagagt cgcttatcaa agatctcgac caacctccca 120
acttttatga cggcaggact atgtttcctg tctgggtgca cgtttagtcc aaagagagat 180
atatcataca aaaagtttat tcacccaact ccttcttcat tacttgataa tagcttgtt 240
gaacgaaaac tgaaaacctg ttccaacatt ctctatcgga tacgagccca acaacagaca 300
gaaggaaaaa aagaagaaga aagaaaccat caactcagtg attacgagtt tgcagaacgt 360
tgtatggatg gtgggtgccc tgtggaggat gttcaagaac tcttgggtcg ttttagaggac 420
cgaagaaaaa c 431

<210> 4273
<211> 456
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-D2

<400> 4273

cgggtccacc cacgcgtccg cacacgcgtc cgccccacgcg tccggatatt cctcgcaaggc 60
aacaagctt acagattgca ttagctttc gtgatgaggt tgccgacttg gagaaggctg 120
gttgtaccat cgttcaaatg gatgaacctg cgcttcgtga aggtttgccca ttgaagaagg 180
aacgttgaa tgaatattta gattggctg tgaaagcttt tcgtcttagt acggtcgttg 240

cagcacccaa gactcagatt gtcacccatt tatgttata tagtctaa gatattctaa 300
aagccatcga tgagatggat gccgacgtat taaccattga gaatagtcgt agtgatgatg 360
ccatgttgcg tgccttgcc aagtatggtt attcacgtga tgtggacct ggagtctatg 420
atgttcattc accggctgtta ccgagcatcg aatttt 456

<210> 4274
<211> 186
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-D7

<400> 4274

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ctgtcaagtc atcaattgca cccatccatc aacacctgcg aacatgcagt ccaccatccg 120
tacgacggaa agattcgagg attcttgact agatacgttt acataggagg gacgtgtac 180
attcac 186

<210> 4275
<211> 446
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-D8

<400> 4275

tccccgggtc gacccacgcg tacgcccacg cgccggat ttggctgtga ttgttgtcgt 60
tggttggaga ccatggtag cggccaccctc agtagtatgt cttagccag cttatggctc 120
acaagggtct tttgtacac agtcattctc ggtaagttgg tactttggtg gtgggttgg 180
ttgtgggtg gctcagtcgt tttcaaagc cttttctatc gccatagatg gagtgatggg 240
aaaaaagggc gacaatgttt ggaataacaac cttttataac aatggaaag tcttcgactt 300
ttgcgcataat agtgcacta cgtatgttatac tacaagcgtt aactttatcg gaaactcaca 360
cacttgcattt tatgtcatcg ctttagcggtc gacgagcttc atcgtctatt ttatcctgtg 420
ggtgcttacc attgtggacg tctttt 446

<210> 4276
<211> 349
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-D9

<400> 4276

ttccggggcc acccacgcgt ccggacgggg ataccggcaa gtttgagca tgccattaaa 60
cagtagattc gtatgttagtt gtcactctgc tcgtagcgga aaactaaaca ggtgaaacca 120
aatgcaaaag cccgcaggtt ctactaagat cgtacgataa tcacgcaggg gtggcaaaag 180
tggactatgg gaagagaaggc accagttcc tctaattcgtc aatcacactt gctaagtgac 240
caggcaaacg ctcccccaca tgatcacacc ttgttaactat aggtctcgaa ggaatctcca 300
ggttgcaagg tagtagaacc taaaactggt attttttgg gagcatcca 349

<210> 4277
<211> 396
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-E1

<400> 4277

acgcgtccga agaaatgttgcgttccatcggtgt tgaacgccag agctcgagca tcagaggcgt 60
cgtactttcg aaaaggagag cagtttagaa cccacgagtt gagggaaaagt ataagtaagg 120
aagaagtggaa aaaacttcga caagaaaaaca gatctttggaa ggaaaaaaaata aggagtggag 180
agtttcaagg tctgcctgag atcctacaga atgtctggat accatcatgg aaaccggaaa 240
acaatgttca taccattgaa agaccgcttc aggttcctttt gaagagagaa aacaggtttt 300
cggttaaagaa agaacaagct ttgcccacca gtgagctttc cagttctgca aggtttgcag 360
cacacccaca tcatgacttg accagaggaa gatacg 396

<210> 4278
<211> 407
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-E12

<400> 4278

gggtccaccc acgcgtccgc acacgcgtcc gagcgctct ttgaattatt ggaatgagcc 60
ttttgtgatt ctggacgctt cttatccacc aagtacggtg gccaatatat tgccctccaga 120
acaacttgtt ccatttgtag ttccagttaca taacaacaac gatggAACGA caaaagaaaaa 180
tccgggttgc ttaccgaaag aatatttaga agctgtggat gaaaaggcaa agtctgtaga 240
cacactacga gaattggta ggcaacaaca aggaaacttg gacttggAACAC gaactgtaca 300
gcattatTTT cgagaatggc tcataatctac agggaaatata agacaaattc atgacctcg 360
caagttggca gagttttt aataaaaagtg gtgattttat gtaaaaaa 407

<210> 4279

<211> 220

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-E2

<400> 4279

ccgggtccac ccacgcgtcc gaatcggggt agaatgattc ggctgcacat ggattatcct 60
tgtctttaa tactgtttcg agttccgtca ttgctcttgc tatgagtttc tcataacata 120
aactctgttg ctgcgactgg ttggatgacg actcggcttc ttctgggggg caataaccagt 180
caaagtgctc ttactcgat tccgcatgaa aaactgagga 220

<210> 4280

<211> 397

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-E3

<400> 4280

gcgtccgcac acacgtccgc tacaaatcga gaattggctc aaggtcgcaa agaaaaccca 60
tattacttgg ttatattca gaatggacag ctgctttcct acagtcgttc cttgggaagc 120
aggagagaat ccgttatct gtcattgtta tggctctcat tatgacagta gagccacgta 180
gtccgaggTC cagctctctg cttcccttgg ctctgtggat gggaggaaac attgtttca 240
agactttaaa ggaaaagatt tccgcaaaga gtctgacccg tggtgacat aagtgtggat 300
acttagaata ggatttcgtt tgctaagtag cataaagttt tagttgcca aagtgttaact 360

tacagggttt aaagtttca atcctttga agtcga

397

<210> 4281

<211> 472

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-E6

<400> 4281

gtaccggatc gagaattcgc gggtcgaccc acgcgaccga cgaagaagat ggtgaatttc 60

aagtttggga tatcgaacag aggaaaccta ttagtacagt tcctcttca tcttcacgtg 120

atgcagtcac ttggcatat tatccagaaa gaaatgtata ttttgtggga agtcatgttc 180

gcttgatat gtggatcct cgagttggaa gacttcaaaa ttccgtatat tttctcaata 240

atttacacgc ttcacatata cgccgccttg tagttcgta tcacatgtt actattggat 300

ttggaacagg aaggctttt ttctatgatt tacgcaaagg taatgagact cttgttcgaa 360

acggtcatcg aggacttcga ctggtcgtg gttgggttcg tcaagagaat caaacggata 420

gtcccggtcc tcacctcatt gaagactaca atcctgctgt atattgcatt ag 472

<210> 4282

<211> 411

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-E8

<400> 4282

cccacgcgtc cgccacacgcg tccggagac ccaaattaag gtgagagaat ggacgataag 60

gaactaggca aaaggatatg gatatctgcgg tagaacatata gacagaagca gcaccgactg 120

tttagcaaaa acacagcact ctgcagaaaa gagagggtgt acagtataga gtgtcggcc 180

tgccaaatag tagagaagaa atcgatgaaa gtgaaagcga gtaaaagatg aggtatagag 240

aatggcggtc ctaacggtaa ggatccaaag gtagcgaagt aaatagacgt ttgaaaggcg 300

tccagtatga caggagaatt gagtgatca ctgtctagtc gtacaactca gcaaaccagc 360

actagctgtc aaaatgcagt aaactagcac taggacggaa cgaccccata c 411

<210> 4283
<211> 422
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-E9

<400> 4283

ggggccaccc acgcgtccgc acacgcgtcc gggcttcatt cggaaagata agaaaccaaa 60
ctttgcactt cctatcgag tttccatctt ttcattgggt ttcgctgggt tgcttagctgt 120
ccttggaaacta gcacgagtag tattttttt cgaatccgta cttggaccac taaaaatgga 180
actgagtttg gtctctttgg gagcagcagc agccccattc gttgtttgg aactatcggt 240
aactgttctt tttagactctc gcaaacttcg aacgctatcc atagttgtat aggaagacgc 300
caacgaagag gctaatttgc tactgcgatc tgtataactt gtggatggaa ccggtgagg 360
agctttgctt ctgttagaac gaatagaaga tttgtttca tcgttgctgt tgttgttgg 420
tt 422

<210> 4284
<211> 455
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-F1

<400> 4284

gggtccaccc acgcgtccgc atagtggcaa ctccgctgtc ttgaaagaca taactgcaag 60
tattgaaaag cctgacataa aatggataac taggacgaat ctcagttactt gtctgaattc 120
tgcagaagga aatgttacgg ttgacttgtc gcccggatgt agcttgaagg atatattttc 180
attgaagctt ctcgacaata actttaagtt ggcgtttttt aatgatgcct tgtttttagt 240
tttaccaggc ttatcctttg ttattactgg taatcgtata ttctgttagac gctcggactt 300
gaatgaaacg gaagcattgg agtcctgctt ttcgtttatg aagatatgcc ccacgtacaa 360
gtcgttggag attcttttgg aaggcgagca aatttatgttta gaagaactcg tgcctattgt 420
atttcgtttc gttgaagact ttcttcattt tcttt 455

<210> 4285
<211> 420

<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-031-Q1-E1-F12
<400> 4285

gggtccaccc acgcgtccgc aaacgcgtcc gcgccaaatg tctgctgcaa cttgtccaaa 60
gaaaagatat caaaaggaga aagtcttggg agaaggaact tttggaatcg ttaacaaagc 120
aaaggataca aagacaggta aatatgttgc tatcaaaaaa gttcgaatgg gaaattccaa 180
ggatggtgtt gcgataacctg ctctacgtga gataaaaata ttgcaagatg ttcgacacg 240
gaaccttatt aacttgttgg atgttttgg gacaaggcagt aatatcaact tggtattcga 300
ttattgtatc gcagacttgg aacaaattat caaggacaaa acgattgcac taagtacagc 360
agaagtgaaa ggagccttga aaatgatact ttgtggagtt gcaaaaacttc acgagcattg 420

<210> 4286
<211> 453
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-F2

<400> 4286

gggtccaccc acgcgtccgc ccgatggtac cgtgctcccg aaatcatctt gactaattat 60
acccgatatt ccacatctat aaatgtatgg tcggctgggt tgtatttttg gtgaaatgct 120
gaacagagggc gttccctttgt ttagaggaac caattcaccc aatcaattgg aagttattgt 180
caagttactt ggaaaacctg gacccgaagc aatatcgcaa gtatgtgtaa aagagtatgt 240
ttcttatcgg attcttattt cagcaacaga ttcgtagcga tcgagcgaga gcacttctca 300
tgcagatgcc tgcttaggacg atacaaaaat tggaagaagt ttttcccaga gctcatcctg 360
aagcccttcc ttgctaaag agactcttgg agtttgcattcc gcggaaagaga ccttctgctg 420
cacaagtatt agatgatcct tactttgcca agt 453

<210> 4287
<211> 364
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-F3

<400> 4287

cgggtccacg cacgcgtccg catgcattga tgagacctgg tagatttgggt tcaaaaataaa 60
aaattgggtt ggcaaaatta aaaaggaaaa acgcaaatct ttcgaattca tgcaaaaagt 120
atgaatttgt aacgcggaat tcgcttgaa ctattggctc gtttatgtcc caacacaaca 180
ggtgtcagaca tacgaagtgt ttgtacagaa gctggtatgt ttgctataag agcgagaaga 240
aaaacagtga cagaaaagga cttttacaa gctattgaca aagtagtcaa aggatatgcc 300
aagtttctt atgtagcaa atatatgata ttcaattaaa acggtattcg ttatattcga 360
aaaaa 364

<210> 4288
<211> 335
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-031-Q1-E1-F4

<400> 4288

cgggtcaccc acgcgtccgc acacgcgtcc gcctgaatgc tattttacca ctttatctta 60
acggccaaat tttaagaact cttcaagaat ccgttagcatc agagttggcc agtcgaatga 120
gtgccatgtc tgtagcttca gacaatgcaa aggagttggc gaaagcacta actcttgttt 180
tgaatcgagc tcgtcaagct gcaattacgc aggaaattgc tgaaatagtg ggagctgcgt 240
cggcactgca gtgaagtttc gttctcaatt gtggggaat actttgggat agcgtggaac 300
tttatataaa catagagtta tctgcaatat atagc 335

<210> 4289
<211> 471
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-031-Q1-E1-F6

<400> 4289

gtaccgatcc agaattcgcg ggtagccacca cgccgaccgca cacgcgtccg ggagaaacga 60
gtgttagcact gtctagtcgt ccaactcagc gaaacagcaa taactgtgaa aatgcagtaa 120
actagcagta ggacggaaag accccataat tcttgactag ataggttag ggaggagaga 180

gaatcatgaa gtagaggagg tgggtaaga gatgaaagac cactgcatga ggataaggaa 240
tctaactgag taaggaaaat aagcttaagc tagttggct gggaaagtaa agcctaagaa 300
agagtaaatt aggcaagcaa aggcatgaga gaagtataat agcagaagca tgcttgaaga 360
aaaagaaaaga gatttcagaa aggaaagaaa agtcagctat agagaacagg tgaaggagaa 420
ctcaaaaaga ggagagcacc gaacgatcga agaagaaact ttgggggta c 471

<210> 4290

<211> 205

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-F8

<400> 4290

aattcgcggg tcgacccacg cgaccgatgc tttgaaacgc cagggtcgta cgttgtacgg 60
tttgggtgt taagaggcaa acaaaaacat ggtgttttc aacaccacca gttgtgaaag 120
aaacttgggt ttcagtctca gtagaccctt ccttggtat gaaatttagag ctttgcaaat 180
ataaaaacact ttcttttac gttgt 205

<210> 4291

<211> 434

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-G10

<400> 4291

gggtccaccc acgcgtccgg aatattttg gcaatatcaa ccgaagactt gtcattcact 60
cggcattcaa atgcctgaga gatatgcgaa tatcgagca gacttcttc cagattggta 120
tatactaacc aagtgcgacg tttggctat tagtaactct acgttttagtt ttaccagttg 180
tttggtaat cagcgaaaaa accccaagtt ttatagagct cattacctt atcgcattat 240
tgaaatagat ctttggata cagacccaat tgtgcacaag gaggtcccc tttccccc 300
gaagaggata tggaaatgata tattgttggtt gtatcgacaa caaggaataa gaggacttt 360
gagaaatata tttggggat ttccttgta tagaattcgt tcactttga ttggaaatggg 420
cctgggtttt cgaa 434

<210> 4292
<211> 377
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-G3

<400> 4292

gggtccaccc acgcgtccgc agacacgtgg ggaggaattt gttggctct gtcgatggcg 60
tggaaactgtt tccgagaaaac cggtaaaaac tggtttccac aacttgtaag ggaccggaaa 120
gttggggcca ttcaacccaa ttggatccc gttccaagggt tgtaaaggc aaaccaaagg 180
aaaccaaagg gacaccattt caaggaccca attataccca agggaaaaaa tttgtggtag 240
cacaaattcg ggtgcaacaa acaggaacaa gggttctccc cggttatgggt attggtgtgg 300
ccagggattt taccctcaat gctttgcacc ctggtagact tatTTTgaa aaaatccgca 360
ataaaaaatgg gaaaaag 377

<210> 4293
<211> 441
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-031-Q1-E1-G8

<400> 4293

attcgcgggt ccacccacgc gtccgaacca gaaagaaaagt ctgccataa taaaaagaag 60
actacatctg cttcagaagg tcaatcagag cttcaatata gacgtcgcat tgtgtcttat 120
ggtaagatg gaagtgtttt atttggaaagg gatctgcaac caggcgaaga ttttagtgg 180
gcgcgtggagg aatggaatga agaaagaagc aatttgggtg atactgtgt agaagcaatg 240
aatcctgaac tagattgggt acaaaatgtat gttgaagaag agaaagtctc tgtgtctana 300
agaattccca agtggattgc agacgatgtc gatttggatg aaagttaaga agaagaggaa 360
gaggacgaga cgaccacaga tgagatgttt tccgaaggaa gaagaaaagtt gtaaaaagct 420
gaaaacctgc actagtttt t 441

<210> 4294

<211> 382
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-G9

<400> 4294

ggggccaccc acgcgtccgc acaagcgtcc gcccacgcgt ccgaaaggta gcgaagtaca 60
tagacgttct gaaaggcgctc cagtaggaaa ggagaaaacga gtgttagcact gtcgagtcgt 120
ccaactcagc gaaagagcaa taagtgtcaa aatgcagtaa actagcggta ggacggaaag 180
accccataag tcgtgactag agagggttag ggaggagaga gaatcatgat gtagaggagg 240
tggggttaaga gatgaaagac cactgcatga ggataaggaa tctaactgag taaggaacat 300
aggcttatgc taatttggcc gggaaagtat agcctacgaa agagtaaatt aggccagcca 360
aggcatgaca aaaatatcgc ag 382

<210> 4295
<211> 398
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-H11

<400> 4295

ttcgcgggtc cacccacgcg tccggacgtg gactttatgg ggaagaagtt actaagattg 60
agcaatgaat aaagacttga tttggcaacg tccaagttc tggttcaagg ttgcaggttt 120
tagtggagca gctgctgttag gtttggagc ctttggtgct catggactcc gggcacgagt 180
cacagaccct tatttggtag aaatatggaa tcgtgcggca agttatcacc agatacatag 240
tttagctgtt tgtgctgcag cctgttgtgc aaataccgag ggaaaacctg cttttgttagc 300
agcgtcggtt ttctctcttg gaatagcgtt gttctctggt tccctgtatg ctttgacttt 360
aactggaaac cgaaaacttg gtgcaattac cccgtttg 398

<210> 4296
<211> 460
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-H3

<400> 4296

gggtccagcc acgcgtccga atcaatgtaa gatgttgaga ccgcagtacg aaaaagttgc 60
aaagacttat cgccatgtga aaggagtggt gattgcagct atcgatgccg ataaatatgg 120
aaagattgca gaaaagtatac gaatcactgg gtttcctaca ttgaaatatt ttccagctgg 180
gaaagataag aaaccgatgg aatacgaactc gagtcggatg gcagtagcta tggtggaattt 240
tatgaatcgt caagttgggt tggatatacgat attgggagga gacgagttgg tacaagatgc 300
tggaaagagtg gaagtgtatgg atactttgc acgcgacttt atgcagtcga ggaatgaaag 360
ccaacgcgag tcgattcgta aagctgcgac cgaagcattg tcctcggatg cttcgttga 420
aggtaaactacaaaatg ccaagttta tggacqqtq 460

<210> 4297

<211> 462

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-01-E1-H5

<400> 4297

| | |
|---|-----|
| atccccgggt ccacccacgc gtccgcacac gcgtccgccc acgcgtccgg gcaatcattg | 60 |
| actttgcaag tgaaaagata taacactgat aagagaaaaga tggaaagtga tgaaccgcac | 120 |
| tttgaatgaa aggatacggt tgcacactt gctatgttag tactgggtga agtgtgcac | 180 |
| tgcgagactt ttctaaaagt gggtgagagt gatTTTgcta aacagtggat atcgcatgg | 240 |
| aaagatgtca cgaagtaagc tgTTgagttg ttgtactttg gaggtttccc gttgatgaca | 300 |
| actgtatcag ttgagtcatt ttTattgtgt tgaagctccg ttTcttggag aactgatatt | 360 |
| tatgaattaa gtatataattt accgtgctaa ggtaattgggt aaatgcttgg ttTcatgata | 420 |
| gagagataca gcataaacag ctTACATAGT taatTTgctt cg | 462 |

<210> 4298

<211> 447

<212> DNA

Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-H6

<400> 4298

gggtccaccc acgcgtccgc atgaatagag agcaaacaat atctgagaag cagcaacagc 60
agtcaagaa tttcggttg ggaattgtga ctccaaatat ggcaagtgga accgctgatg 120
taggtctgat aggcttagct gtgatggac aaaacttggt actgaatatg aacgaccatg 180
gatttaagt agcggtttt aacagaactg tctcaaaagt agacgacttt cttAACGGAG 240
aagccaagaa taccaacata gtggggcgc actcggtgca agagtttgt ggtctttga 300
agaaacccag aatcattatt cttcttgtca aggcggtgta agcagtagat cagtttattt 360
ctatgctcgt gccactttt tctagtggtg atctcatagt tgatgggaa aactcccact 420
ttcctggaca cagacgatga acgaaag 447

<210> 4299
<211> 464
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-H7

<400> 4299

attcccggtt ccacccacgc gtccggaata atatagccgg aaggagatca tcttactcta 60
ctagcggtat atgaagctt gaaagccaac aattattcta ctgcttggtg tttgaaaac 120
tttattcaag cacgttcttt aaaaagagct caagacattc gcaaacaatt agtagctatt 180
atggaacgac aacgattaag tttggtctcg gcaggaagag cctacaataa gattcgtaaa 240
gctatcgttt ccggtttctt tatgcacgca gcaaagaaag atcctcaaga agtttatcga 300
acgatagcag aaggacaacc tggatatttattt catccttctt cctcggttatt tcatttcaa 360
cctgattggg ttatattatca tgaattggta caaaccacga aagagtaggt agatgttctt 420
gtgcttagca ttcttatga ctcaaatac tattctctag atat 464

<210> 4300
<211> 379
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-H8

<400> 4300

gggtccaccc acgcgtccga acgcaaattt ttttcagaac agcaagagaa gaagaaactt 60

gtgaatagaa tagaagaatt ggaacattat ttggaaagaa tcaacaacaa taaggaaagc 120
agcaataacct tgtcgtcatc accacaagaa aaacaagata attcttccc aagtgacatt 180
gttcgagaac aagaacaaca aattagtgtt ttatctcaac agttggcaca acgtgataat 240
actattcattc agttgcaatc tcagttatcc aatgcttac aagaacgaga acaacatgag 300
caacaacagc agtcatcttg tttgtatgaa cataacatga aagaatatga agagaatatt 360
cagtcattgc agtgtcaat 379

<210> 4301
<211> 291
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-032-Q1-E1-A6

<400> 4301

cgggacgacc acgcgtcggg taaaaagtgc aagtgtgggaa tttcagtgca ggtatcgaca 60
atgcaagcgt tttggcccaa ctaatgacca aaaaagatga caagaagcag aaataaaaaac 120
cgcatttact cttcttttag cttaagaaa aagaggaatg agaactggtg agtacgttgg 180
aaagtgcgcg gaaaaggggg gcggccgcac aggaggatag atgattacgt acgggtgaag 240
gcgacgtaag agttcgaaaa tggtgtcagg aaaaattcaa gtcaggggtc g 291

<210> 4302
<211> 181
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-032-Q1-E1-A8

<400> 4302

ggaattccgg gacgaccacg cgtcggcca cgcgtcagga tgtcatggaa gaggatatgc 60
atgcatgtgt tttcgtaagt ggagcagcga tgcttcaaac agtcgcaa at aggactgagc 120
taaagtcaat gaaaagctcc ttgagacttt gtatgggtgt gtttggccc aaacagagta 180
a 181

<210> 4303
<211> 326
<212> DNA

<213> Cyanidium caldarium
<223> Clone ID: LIB190-032-Q1-E1-E2
<400> 4303

ccacacgtcg gacagaaaaca actggaatta ccctagtagc ggcgagcga ggcggaaagag 60
cccactatga gaatcctttt tttcttttga gaaaagaaga gatgtattt gaaaaagaca 120
agaaaatatct gcagcaagaa aagagcaa at tccttggaa ggaatatcat ggagggtgag 180
aatcccgttt atctctttt tttgtatgga agctgcgtta cgatattcc ttgtgtggag 240
tcgggttggtt tggttagtaca gccttaattt tgtgggtgtt ataaatcatc caaggctaaa 300
tacgtaaaga gagaccgata ggcgaaac 326

<210> 4304
<211> 378
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-032-Q1-E1-G5
<400> 4304

accacgcgtc gcggcaaagt atagagtgtg cggcctgcc aatagtagag aagaaatcga 60
tgaaagtgaa agcgagtaaa agatgaggta tagagaatgg cggccttaac tggtaaggatc 120
caaaggtagc gaagtaaata gacgttgaa agggtccag tatgaaagga gaaacgagtg 180
tagcaactgtc tagtcgtcca actcagcgaa acagcaataa ctgtgaaaat gcagtaaact 240
agcagtagga cgaaaagacc ccataattct tgactagata ggtttaggga ggagagagaa 300
tcatgaagta gaggaagtgg ggtaagagat gaaagaccac tgcattgagga taacgaatct 360
aactgagtaa ggaaaata 378

<210> 4305
<211> 450
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-032-Q1-E1-H7
<400> 4305

ggaattccgg gacgaccacg cgtccgcaat gagcagattg agcatctcac tcgagaattg 60

gagttatctt catcaagggt agctatatgg aaaaacaagt taaagtttgt acagcgaagt 120
tgggaagtag atttcagtga gattaacaaa tttagaaaaga ttggatccgg tgcctattca 180
gaactattta aagcagaatg gagagggcac attgttagctg taaagttgat gaaagctcaa 240
gaaactcgga agaattcgc gtcattcat gacaagtgaa acacttcaag tgaacatcga 300
tatgtttatt atggcgctgt gaggcacaat tccatatacg atttggatgaa gatgtaaagc 360
tgaaaggcctt gaaatgccac aattgaactg agaacacaag actgttgcac aaatacacca 420
gtaacaactc tcaaacatga cgtacgcaaa 450

<210> 4306
<211> 378
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-A10

<400> 4306

gatggctgtt tgcaattcgc ttgtggcggt tgaagtttg gttaccttga aataatgcag 60
atatttgtaa agacacttac aggcaagact ataactcttg aagtggagcc ttcagatact 120
attgagaacg tcaagtccaa gatacaagac aaggaaggaa ttcctccaga ccagcaacgt 180
ttgatatttg ctggaaagca actagaagat ggtcgactc tttcagacta taatattcaa 240
aaggagtcta cccttcactt ggttgcgt ttgaggggtg gaatgcagat atttgcgt 300
acacttacag gcaagactat aactcttgaa gtggagcctt cagatactat tgagaacgtc 360
aagtccaaaga tacaagac 378

<210> 4307
<211> 388
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-A6

<400> 4307

ggatatccgg atcgaccacg cgtccgatca tattcaatac tgacatggtg gaaacttttg 60
agttggaaaaa cttgttgcaa aatgcttga ttaccatata tggagcagaa gcacgtcatg 120
aaagtagagg tgccgcattct agagaagact atcctaagag ggacgtgag aactggatga 180

agcacactct cggttggatt tccttccta agaaggcttt tgttcagga gaccgaaaag 240
catatgtaaa actggattat cgtccagtga tatcgaaac gttagatagc acagagcaag 300
aatctttcc tcctgctcaa agagtttatt agatattatc atgtagaaag ccgtattctt 360
ttgcaaataa accgaagagt gcatgaaa 388

<210> 4308
<211> 315
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-C10
<400> 4308

gggtcgacgc acgcgtccgg acattaaatc ttcaggtcct catttcttgg ttgaacatgt 60
gaaacgcact ttaggaatgg atttgcata tgaaataact ttcgaaaccg atgcaatggg 120
caatttcact gggaaataa gtcagcctat tgtgaatgcc agtagaaagg cagattact 180
gcaaatgtta acgatgcaag aaagaataag tttggaacaa gtaattgcag taggtgatgg 240
acccgtatct ttagaaatgt tgtctcttgc aggaatggca atatctgtcg atcaggtatg 300
gtattgtact cggtt 315

<210> 4309
<211> 207
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-033-Q1-E1-C11
<400> 4309

ggtccgagtt tacgggtcca cgacgcgtcc gcacacgagt ccgcccacgc gtccaaaaaa 60
aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa 120
aaaggggcga cgcacaaaag gataaaaggg tgggtactc ttgcatgcaa cgtcataacct 180
cgggggggggt gtcatttaaa ttcaatt 207

<210> 4310
<211> 402
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-C9
<400> 4310

ggtcgacgca cgcgtccggg tggccaaaac caccaaacat ggcgagttgg attcgaagtg 60
gttttcgtgt cacgaaacac attaccaaca agacaaaatag aatattccaa cgaggaaaaa 120
cggcgcggttc caaatcgacg accactggtg atcgaacctg gttagccatc caagactata 180
gccatcaaag gtttgcgtgt cggaatattg caaagagaag tccaagtatc tccgacacta 240
tttccaagaa taattgtgtg gtgagggact ctggcgtgc ttctcttgcactgctg 300
cggactcttc caccaaagga cttgcttgc tcgaggccgt agaaggaaaaa gctgcatcgt 360
tggcaaagtc tttggccgtg ttggtaaaa atagtgtatgt tg 402

<210> 4311
<211> 482
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-E11
<400> 4311

cgggccccgt cgagattacc gggtcgacgc acgcgtccgc atcttagggt tttattggat 60
actctacatg tctcaatcag ttcgtctatt cattggaaac ttgtcggtgaa agactactag 120
cgaaagtctg aaacgagcat ttcaaaatgc cgtcggtgca gaatcaagtg ttgtaaacgc 180
acacgttgtc atggatagat attccggacg ttcaaagggt tttggatttg tgacctttac 240
ttcaccagaa gaggctgcct cggcagtgaa tctgcttaat ggaaaggaag tcgatggcag 300
agcaataagg gtggacttgg cacacgaacg tgaagaagga gcttcgcgc aattcagaag 360
gaacgaagtg gaagatgagt agcttttagg ataccactgt ctgttgatag aacagacact 420
gctcggatgc gttatgttgc gccagtcctt acagaataaa gaccacaagt gcgattcccg 480
tt 482

<210> 4312
<211> 427
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-033-Q1-E1-E12

<400> 4312

gggtcgacgc acgcgtccgg gaggaattcg cgtggcagtc attgactgtc agccttacc 60
tgaaaatagt cagcaagtaa ccaacgaaaa aaattttaca ggatgtttc aggcaacttt 120
tgataaaactg gtggaagaaa gaggcggtcc acaactccaa atggtatctt tcaacgctca 180
acaaggacag ctcccagcgc ccgacgaaaa ctccacgct tatcttagtaa ctggctcggt 240
ctcttcgct tacgagaaac gaccctggat tgagaaactt ggacagttt taaagcatac 300
atacacaaca acccaagttc ct当地gatcg aatttggat ggacatcaga tggcaca 360
ggcactanga ggactttcg aactttgtaa aaagggtcca gaggttgggt tgagtacatt 420
tacacca 427

<210> 4313
<211> 439
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-033-Q1-E1-F12
<400> 4313

gggtcgacgc acgcgtccga aataatcgat gattccgagt agcgatggcg aaaagtgaac 60
cgggggtgat atacataggt cacttaccgc atggttttta cgaaaaccaa ctaaagggtt 120
ttttctctca gtttggacc gtgctgaaag ttcgagtggc aagaagcata aaaacttatac 180
gaccaaagggtt atatgctttt gtgatgttcg cgaaccgaga agttgccaa attgcttatac 240
gagctatgga cggattttc atgtataaca aaattttgggt ctgtaaaatg gtaccaccag 300
agaaaagttcg cccgaatatg ttttagaaagt tcgtgaagat tccctggaag aagctagaaa 360
agaaccgccc tgctttgccc ctcaccgaag accgggttcaa gagactcaag agaaaacaac 420
ataaaaagaaa caaagagct 439

<210> 4314
<211> 441
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-033-Q1-E1-F9
<400> 4314

gggtcgacgc acgcgtccgc ccacgagtcc gagagatgct aaaaagtacg cttctcctga 60
aagaacaaga actgattgcc gatataaaag gaagaacgga ccgagttta caagtcgata 120
ttgctggagt attcttctct gccgttttt caggagttt gatgattcct gccttttg 180
cgttcaatat gttaattcca atagagcatt tgaggaacgg aagtacttat ttttcattg 240
cgtagtaat tcttgtttc gtagctattg ctgttctggc cattctgtat gtaaggtggc 300
ttaaaggaaa taaaagaatg cgacttgagt tgctgtggg caaggagaag acagcaacaa 360
taacaggaac agtgaatagt tagaaacgtt gatattcgta gatattcaact actttaaaa 420
ggatctttt ctgcgttctc c 441

<210> 4315
<211> 433
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-033-Q1-E1-G11

<400> 4315

ggtcgagna ttaccggggc gacgcacgcg tccgcacacg cgtccgccc cgcgtccgg 60
cccaaatctc ttcatgttt tgtgccgtgc aagagcagca aacgctgcac gcataacaagc 120
acttgttga gagctcaaat aaggcttcct caagtcagtg aagtacagca cgccagttc 180
gatgagtgtac tacctctggc tagaaatata tgtttcgcc tgcaagagga gcctcaagat 240
gacgaagctt atgaagttt aaggaaatg ttatcacgag aagaaggcgc cagagcttt 300
ttcggtgaat atcttctga ctttgagttt cgcttagcag ataaaaaacc accatttaag 360
ctagagaagc ttctgaagga ttgtgtatgag catgtaccta atctccttgc tagaaatctt 420
gcaatgtcag ttg 433

<210> 4316
<211> 203
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-G12

<400> 4316

ggtcgacgca cgcgtccgcc acacgcattcc ggcaaaacgg agtgacaaag ttggaagaaa . 60
atgcctcgag cacgtaaagt tgtgtctcgc tcggttttaa gaaggtaacc aaaccagaga 120
aaaccaccc cttataagga tggccaact caaacctcca ataacgcaa aagttccacc 180
aatgccaaac cacatagata tcc 203

<210> 4317
<211> 379
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-G5
<400> 4317

accacgcgtc cgactcaaag gaaaaggata cgagtcaact gaaagcggag aaatattata 60
tatcggagg tgtctttgga gcatttcatg agttacttac cgagactgtg aatgatttat 120
gtccgtatcc gcttattgaa aacaaggaaa aaggtccagt ttcttttgt tctatttatg 180
gtccaagcgg cgactgtttg gatcatattt ggtctggagt gttgccagtt ttgaatattc 240
acgactatat tttctttcca aagattggaa gctttctatc cttgggtta cgcaattta 300
atgacttttac acgcaaagta gatactcggtt atatcggttac tttgtgaata aaaaacaacg 360
agttgtttta ttcaacaaa 379

<210> 4318
<211> 428
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-H10
<400> 4318

gggccacgca cgcgtccgca cacgcattccg cccacgcgtc cgccccacg tccgcccacg 60
cgtccgctcg aagacggaca tcctgtctgc atacttttgtt aattgctttt acaagtaact 120
gcaacaaaaa atttcgtata atggagcctc ctttttgtt attaaagtctg cttaacaatc 180
aggcaaatgc tatagtgctt ccaacgaaaa gataggattt caactttca attacaacct 240
agaatagctt atttggaaatg agaattcaag atggtttacg ccaaggcaggt cgaaacgccc 300
caacaaacaa agatagctt tgagaacca aaaggtcgag gcgaactctc gtctgctttg 360

agaaaaggcatt ctgaaaaat gggttactag gcacaaaaca aaagtaaatc ctaatttat 420
tcattcac 428

<210> 4319
<211> 311
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-H11

<400> 4319

cgcgtccgcc aacgcatccg cccacgcgtc cgccccacgac tccgacaagt gtcgtcagta 60
aatgtctctg tcttttcctt ttgaa 120
aaaaaaaaaaaa aaaaaaaaaaaaa aaaaaaaaaaaaa aaaaaaaaaaaaa aaaaaaaaaaaaa 180
aaaaaaaaaaaa aaaaaaaaaaaaa aaaaaaaaaaaaa aaaaaaaaaaaaa aaaaaaaaaaaaa 240
aaaaaaaaaaaa taaaaataaa aaacagaacg aaaaaaaaaaaa aaaataaaag gaaaaaacca 300
tgagaagaca g 311

<210> 4320
<211> 366
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-H5

<400> 4320

ccacgcgtcc ggcgtgatac taggatggga ggtttcggct actttttaaa gtcaactttg 60
ttttctggca gacacccgga gattattcca ttggttccg ctattgctct gtgtggagtt 120
tgtgcggttt ttgtgagcat cgacaacttg ttttataatc caaccgtgg agctctcaag 180
tcagagcggg aagcgtattc gcgcaatgag aggcaacgtg actatgaaga cagacccttt 240
ttgaagctgg tgaaaccact tcgtgaccgt cctatcgtt ttatcccccc aaatgatgaa 300
aatagcagga ttccctcatta gttggatagt aaaataaata gttgttgagc tttaaaaaaaaa 360
aaacaa 366

<210> 4321
<211> 144
<212> DNA

<213> Cyanidium caldarium
<223> Clone ID: LIB190-033-Q1-E1-H9
<400> 4321

ggtcgacgca cgcgtccgta cattaaagag gtagcgata ttcttattta aaaaaaaaaa 60
aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
aaaaatacac ataaagaagg cgac 144

<210> 4322
<211> 446
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-034-Q1-E1-A10
<400> 4322

ccgggtccac ccacgcgtcc ggacatcgct acggaaatg gagtcaaagg caatccttgg 60
tttctgtgta cttaggaat ggcaagatat tacttgaat tagccaaacg attctcgaa 120
tatgcaacgc tgaatatatc ttctcggtgg atgctacctc tattagaaca tttgcgaacg 180
tcttatttca agttgaatcc atctatgcc tccactttc atgttgaga gactcttcag 240
aagccacaat tgtgtcagat tgcacaagct ttgttaacag aagcggataa aattctgtat 300
tctgtttatc gtcatgtacc agattcaggt atgttgacgg aagaaatcaa caggtatacg 360
ggattcgaac aaggagcaaa aaaccttaca tggagttatg actcgttgt tactgcagtc 420
tggagcagga attattcctt gaacac 446

<210> 4323
<211> 382
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-034-Q1-E1-A11
<400> 4323

tacggtccta aattccccggg tccacccacg cgtccggagg aaagaacgtt tcagttcaaa 60
gcaacttatac ttcaatagta atgacgccac aaggacgat aagcttgtct tatacagaca 120
agtgccttg gaaaattcga ccagttact tcaaatgtct ttccgtcaac ttttgtcaa 180

gtctatgtgg aagagaaaaag agagaacact gtattgaaa gctgacctag tacaactgg 240
gcgtcttgcg gagttgaggt gaacaattta aatgaaatga atagtctcat gtaccgaaat 300
aggttcacag gtaattttt tagcagtcac gtggttcct gacgatggaa actcgcaaag 360
aaaagtttt tgatcaatac ag 382

<210> 4324
<211> 462
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-A12
<400> 4324

taacggtccg aaattcccggtt gcgcacccac gcgtccgctg gaattccag tgccttg 60
gctccattat tggcaggaat tccactgaca cacaaggaaatggagcaaaag tgtgacacta 120
gcaactggac atgatttgc acagtttagac tttgagtgcc tggcaaagtc ggaaacttta 180
gtttcgtca tggcaaccag gtcattatct gaaatagcac aaagactagt agaaaatggc 240
aaatctcctg atactctcg agcagtaata tacaatgctg gaatgtcgaa tcaacacgaa 300
agcttggca ctttgaagga gtggcattt ggaagtttaa aggtctgttt tgaaccagga 360
acggttatca ttgaaagagt tggcagttac gccttgaaa aggagacctt ggctccatag 420
gaggagctt ttagtcattt ggagttgcattt atttggagaa aa 462

<210> 4325
<211> 330
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-A3
<400> 4325

ctgtttctt tattttgagt gtccttgcattt tccttgcgtt atgcaggata attacttgat 60
atcttagtgat gtcgcgtgag atagagtgtt actcgttgt atcgtgagca taaacaacag 120
gtatgttccta aaaaaaaaaaca cataacagag agggagcaca gacaatcaga agtacaaaac 180
atacaactag ggggggtgggc tgatcaacaa aaggccagat gaataaaaaa aaaaaaaaaagg 240
ggccgcggccca agaggatcaa accttactta gccgtgcattt caacgtcaaa gcccttcaaa 300

aggggcacca aaattcaatt cacgggccgt

330

<210> 4326

<211> 397

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-A7

<400> 4326

ccacgcgtcc gacagaaaaca actggaaattc accttagtagc ggcgagcgaa gcgggaagag 60

cccactatga gaatcctctt tttcttttga gaaaagagga gatgtatttgc aaaaaagaca 120

agaaaatatct gcagcaagaa aagagcaaattt ttccttggaaat ggaatatcat ggagggtgag 180

aatcccgaaaatctt atctcttttc tttgtatggaa agctgcgtta cgatatttct tggtgtggag 240

tcgggttgtt tggttagtaca gccttaattt tgggtgtttt ataaatcatc caaggctaaa 300

tacgtaaaaga gagaccgata gcgaacaagt accgagagga aagagggtgta tgatgcaggc 360

aaagaagtga cgcagtagat tagagagtaa cacatgc 397

<210> 4327

<211> 439

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-A8

<400> 4327

ggaatcatgg gactgaccac gcgtcgggca gagttacta atctctccag atgaaacgag 60

aatgagtagc tgtagccaa aaaagtgc当地 taaatactca aagtttcaa ttattattt 120

ctgagaaaaga agaagaatga gaacgaggca ctattctaaa attatgcacg accctcgcaa 180

gcccatgg agtagaaggc tttccgtgg tttgtggttc cgagagcgaa gaaagcgtcg 240

tatcgaacgt gattatggaa ctcttcgtc tccagcccccc ttgaattcct atacaatgt 300

tggtgagca acggaagcgt tcttactttc ggcctttttt agtttcctt tactaagact 360

aacagatgt aaggacttgt tgggtctta aataaatctt gatgttttc gtatttataa 420

gtaacgcgaa cggttgaat 439

<210> 4328

<211> 455
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-C10

<400> 4328

gtccgaaatt cccgggtcca cccacgcgtc cgcaacttct ggtctatcca ataaacttgc 60
tgccggtatt ttgggtactg ctgttgcac catgggaatg ttatctacga gttgtttcat 120
tttggcaatg gatgtttcg gtcctattca gataatgctg gaggtattgc agaaatgtca 180
atgcaaccgc cggaagtacg agaaattact gatcgaaaatgg atgcagtcgg aaatactaca 240
aaaggcattga ccaaaggtaa cgcaagggttgc tcagcagctt tagcggcatt tttgctgtt 300
cgtgcttata tcgatgaagt gaacaactac ttgccgtcaa atcgtgctct tacttctgtg 360
gacttgagtc aaccgaaagt gtttgggttgc ggcatgatag gtgcaatgtt agtggccta 420
ttctcgggct tagctatacg tgcaacttcggt aatgc 455

<210> 4329
<211> 460
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-C11

<400> 4329

ggtcgaaat tcccgggtcc acccacgcgt ccgcacacgc gtccgcccac gcgtccgtat 60
ttaatttgtg gagaaagcgg tggtggaaag ttttcattat tgcaacttt agctggtttgc 120
tggaacgatg gcgaggaaaa gattagtata cttccccag agatcacctt tttgggtgc 180
cagaaggcattt acattgttct tggctctatt ttagagaaca tactatatcc aaagatggat 240
aactttgata ctttctccag tcaagacatt tcaagattgt tagaagaggt caatttgagt 300
catattaatttgc aacgtctggg tggcatcaat attccatgg atttaagcaa catcctcagt 360
cttggagagc aacaacgact ggcgtttgct cgtctttgg caagtaaacc aaagttgtt 420
ttcttagatg aaagtacaag tgcaactggat gaggacaatg 460

<210> 4330
<211> 346
<212> DNA

<213> Cyanidium caldarium
<223> Clone ID: LIB190-034-Q1-E1-C12
<400> 4330

atccccgggt ccacccacgc gtccggatcg ttccagctta taacttgcca cctaattcag 60
aacatatcaa agttctccga gtagtaattc gagaaacttt ttccagagat ttgtgtgata 120
tgttgtggag agatttaatg tggacgttgg aagaactgga cagaaaaact ccagattcta 180
tccatcatgc cagggaaattt ctgctggaaa ggaatcggca aaaacacaaa gcatttgctc 240
atatggagcg ccaaaaaacag aaaaaaaaaagg gagtttggata gttttggata aaggactgtt 300
gttgggttgc tagtgggttta tgaaggatat ttgataattt caaaaaa 346

<210> 4331
<211> 429
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-C9
<400> 4331

tatacctaattt gcaaccatct taaagaaaaggc agaatttacag cttgcattgg tatccatagg 60
attaccagga tattatgtct cggtgtttgc agtggacaag tttgatcgga aaacttggca 120
aatatttggaa ttgttatga tgggtggat aagtatttggattt attggaggtt ttttgcctta 180
tttgaagtct gtgcctgctg cattttttt aacatatggaa atatatttct tcttttagtta 240
atttggagag tgcaactacccat atatgattcc atctgaagta tttccaaactg ttcttcgtgg 300
cactttttt ggaatagctg ctgcgtttgg aagaacaggt gctgtgtgg gaactcaaatt 360
atttgaacctt attcaaaagg cagttgatac tcatagtcat agcaatattt taggtgctcc 420
agtagttttt 429

<210> 4332
<211> 273
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-D10
<400> 4332

ttccccgggtc acccacgcgt ccgcacacgc gtccgcggac gcgtgggcga gaatcgatt 60
actcttttg gcgccaacac agaagtcact gtggaagact taaaacttcg gatctatcag 120
atgaactaca cgtgtcacgc tggttctct ctaataaaac gaaaatcggg ttctaagatt 180
tggaaaaaaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaatg gaaaaggaga aaaagaacta 240
aaaaaaaaaa acacgggtg gtagccacgt cg 273

<210> 4333
<211> 446
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-D12

<400> 4333

atccccgggt ccacccacgc gtccgcacac gcgtccgccc acgcgtccgc ggacgcgtgg 60
aaaaaaggta agaaagagggc aaatacggga aagcagtaaa agaagaaaga gaaaggaaaa 120
aactgagtat caggaagaaa agagggagta gatgaggaaa gaaagatcaa gaaaaggttt 180
acgagagaag gaagttagaaa gaagagagtg taaggcggcg tcataataga aatccgaaag 240
gagtagaaga aaagagagag aagaaagaaa agaagagaaa agccgtactg aagaccgaca 300
caggtactcg aggagaaaagg agacccaaat taaggtgaga gaatggacga taaggaacta 360
ggcaaaagga tatggtatct gcggtagaac atatgaaaga agcagcaccg actgttttagc 420
aaaaacacag cactctgcag aaaaga 446

<210> 4334
<211> 231
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-D9

<400> 4334

ggtccgacat tccccgggtc acccacgcgt ccgaagacgc gtgggggtgg tccaagttgg 60
aaaaacgacg tcgtcggaaac aagtcgtatt gcacagtgg attggatatac gacggctatt 120
atggataaca aaataggaaa gcgtggaggt acttgaaag acgtttcagc aacagacgtc 180
atttcaaatt aacgcaaattttaaaaac gcaaccgaaa acttgaaact g 231

<210> 4335
<211> 466
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-E11

<400> 4335

cggtccaaaa ttccccggtc cacccacgcg tccgtgagtt gagaccggaa gccaaacaag 60
ttgtttcggtt ttttagagaa aagcacaaaa tggagtgttg gttagtaacc ggtgataacg 120
atagcactgc atttgcagta gccagagcag tagggattcc gatggagaag gtggtttctc 180
aagcattgcc tggggataaa gttaaagttt tagaaagttt attgcagaaa tatcaaagtg 240
caacaggaaa ggccaagtct cgagtcgtat ttgttgaga tggagtgaac gatggtcctg 300
cattagctgc agcggatgtt ggtgttgcca tgggcacgaa gagtcaatta acagcaactg 360
cagctcgtgc tattttaatg actgataata tttctggact tgcgacactg tttcacttat 420
ccaaagtcac ctttcgtcga attctgctca actacttttgcgcact 466

<210> 4336
<211> 389
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-E8

<400> 4336

ggattcatgg catgaccacg cgtcgggcat tggcgatga atacatcgac agaggcgctc 60
ttcggcgtac aacctaacaa ggaagaactg aagaaagtat tgcaagtaaa cgcaataact 120
ttagcaacat attttgctat tattcgtgct acaccttttgc ttatcgatgt agtaaaggct 180
attttcgaga aagagtagaa ggctttagttt tggcttgc tcttggaaatg 240
ttacccaact gaagaatcat tggaggctat atatgttgc agtgtttctt ggtgtcctt 300
gtgttgacag tttgtttttt ttgaaaaact aacaatatga tacaaagtgc agaaaaaaaaag 360
tctccacgtg cagtgcacccag caccaatcg 389

<210> 4337
<211> 456
<212> DNA

<213> Cyanidium caldarium
<223> Clone ID: LIB190-034-Q1-E1-F10
<400> 4337

attcccggt ccacccacgc gtccggaatc gaatgtgtgg ggaatgttcc acacccttag 60
actttatcag aaacctcaac attctgcttg tcacatataat ccagctttg ctttccaac 120
aattgttatcc caggtcttct tatcgtaactt gttgagattt tcaagggtggc gagaatatcg 180
aggtggagaa ccgcaaataat gttctcttg tggaggcctt cgtgtataac cttgtgacgt 240
ctgttcaggt attggtaaaag taaacaaggg tgtatttaat agaaaacaaca gtttaagaaa 300
agactccttg gttggttctc cttggacagc tggatgttcca atccaaggga gacgtcactt 360
tgtttgtatt ataaaaaagg gcaaaggcaa ggatgttatt gcagtcttac agaccacttg 420
tggcaaaaaa gagtctagaa ttccgtaga agtacc 456

<210> 4338
<211> 444
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-F11
<400> 4338

ggtccgagca ttcccgggtc cacccacgcg tccgaattct gctggacctg acattattgt 60
tcgagtgctc gtgcctatacg atgctagttc ttgcactcgac aagaagagac agtcttctt 120
gacccaagta tctatggata caggttccaa gaagagaaga gtctatttga tagggatagc 180
attgaaatgt tatggaaagt ctgggtcggt cggtcgctagg attaaggagg aagttaacaa 240
gtttctagtc ccagttcgt cacaatttggaa attggagagg aacgatattt gggctattca 300
gttgggtcggt agtacaagtt acaataatga agtatccaaat cattttgtac ataaggcagaa 360
ctgggtataatc gataccagaa aaaaggtttc ttcttcgtca tctactcctt cgcgtatcat 420
gaattactcg agctccgatt aaga 444

<210> 4339
<211> 466
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-F12

<400> 4339

ggtcctaaat tcccgggtcg acccacgacg tccgagatga agcgttgcgt aaaggggagt 60
tgggtttcgc aaaaatattt tatgaagctt tacaagttgt tggtaacca cccgacttga 120
agaaaaagat tccatctcag ggaggagaaa caagaaagaa acccacaacc accacaacca 180
caaccaccac aacgaatagt ttggatactt gtcttgaagt tgcatctct tcacgatga 240
atggcgatga tgataataat aattgtttcg tatcttcgaa tgaagagaag agaatatcat 300
ctccagagtc ggacgcttca gaacagacgt ttgtggagcc tgctgctggt agtctatggg 360
acaatcaaga aatgtttgga gatgcatcga ttgattcgga aggaattccg ttcttgaatg 420
acactcacgt tagcagtgat tcgatgaagg tatcttccaa caatgc 466

<210> 4340
<211> 462
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-F5

<400> 4340

ccacgcgtcg gcccacgcgt ccgcccacgc atccggaaga gccaaagtgc atgaaagcag 60
tttcctatga aagcacgcat agtgaaaag attccacttc gttctgtcc gttgctgcat 120
caacaaccga taaccggaag acgcaaatat ccgatcattc cattccatcc tcttccaata 180
caaatatgag cgattctaag gagaaacaac agcctattca atgtaatgat gatagttgg 240
aagaatttct tcataatggat aaaaaaccaa aacgaagtat aagagacaaa ctcaagcaag 300
tctaaaagga ataaatcatt tatatgcgtatataatgat attaagttcg acccagggt 360
ggaaaactcat gaatataaga ggatgcaggt tccttgata aataaatcga aggctcattg 420
gatgcagtag gaatagagcc atttgtaaaa aaaaaacaat ct 462

<210> 4341
<211> 410
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-F9

<400> 4341

gtaacggtcc gacattcccg ggtccaccca cgcgtccgac aagagaagtc agcagtgggg 60
aaaattggc aatgtacagg gaagtatgac ccagtaatga ggagtggagt aaacagaaaa 120
ggaagtaaaa ggagggaatg aagggaaattt atggcaaaaa cacgtgccag cagcagcgg 180
aaaacgtgtg tagcaagcgt agagcagaag aactgggtgt aaaggtcgag tagtagagta 240
agtgtaaaag gcaaaggaaa ggagagaaag agggaaaggga tgaaatgcag agatctctag 300
agaaaggcaa gaaagacaag aaaggaagac acagtaaatg aggcgagaaa gcatacggaa 360
tgaaacggat taggaacccg tgttagtctat gcagtaaaaag aaagaacaac 410

<210> 4342
<211> 133
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-G7

<400> 4342

accacgcgtc gaccgacgacg tgggtatagg gacatTTTTT gtttcgtttt tttttattct 60
ttcctccgct ctatcatcat cgtttcttgtt tcttctaaaa tagacaatcg aatgccttta 120
cctttcggca acg 133

<210> 4343
<211> 432
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-H11

<400> 4343

tattaaggcag aatttagtag tgactataaa tggtcgtgag cgatttcttt tagatgttgc 60
caacgtgttgc ggttttactt gcacagctgt gtca gggaa gaaaggagttt ttatcaagtt 120
gatatatcctt aagttcgat tgaagtttgtt gaaactgtca tatgagaagc atcctccat 180
tcgtttttttt cacagtatat tttcattgtat tcgcccagag gactcacctt ctactcgagg 240
atataaggttt caagtattac ttccgcataat tctttatgtt gatggagttt tttgttaagca 300
actgggagaa ttgagttat ttcgcccagag tttggtaaac gagataccaa attgtactga 360

tgaatacatt gccagggttg tgccgtcggt taatgccacg atagatgagg aacatagccc 420
tagtggaaag ac 432

<210> 4344
<211> 242
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-H3

<400> 4344

gcgtcggctc cgcgcgcatc tttgttaacg agaggcattt tggatgccat ctccgggttga 60
attttaatat acacaggatt ggtggagttt ttgacttatt gtttacgctg caactcgaac 120
tttttaagac gcaaagccat acctatTTT agtattgtgg gatttgtctg gttacgagcc 180
atctgcatgg cgattatcgg agcgtgggcc taagaataaa atttgtttga gaaaaagaca 240
gt 242

<210> 4345
<211> 464
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-A11

<400> 4345

ccgggtcga cgtacgcgtc cggatgaggg ccaacgctgg tcaagatggc cttgtgcaag 60
tcaacaaaaca tagaacagta aagagattgc aagaagataa tattttgaat agagcactat 120
cacaaccagg agatgtatTTT ctgtgctttt gcaacatcca gttgttggtg aatgcagaaa 180
gagctatgtat aggaaatatt acttgtccag aaagtatcga attgtgtcgt ctattagctg 240
gacatataac agtttggttc gatgaacatt tggatgactt tcgtttggaa gctatcttgg 300
gagcactatt gtgtacttgt taatgtgagt ggcagcgttt tgaacgagaa ttggaggtac 360
aagaatggaa tgaattggtg aagatatctt ccttagatac ttggaagctt gtgcttggta 420
caagacaaag agtggataat atgttacagc gagtacacaa gctg 464

<210> 4346
<211> 405
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-A2

<400> 4346

gggtcgaccc acgcgttcga accacccgtt ccgaaaaacc cgactcgcaa tgccgtagat 60
ttcaatcgag tctggtgtca aacaactttt ttggcaccat cagattgtcc acatgtcaca 120
ccgtggcatc agttagtatt gggacgtttt cattcaatgg tcgagtaaca tgctcccttc 180
tctaacctgg acatgcattt gcatcaactt gtttgatcac acctgtatac agtatcaaag 240
cgaaaagatt gctatacagt ggcataatcta ggcatccggg agccttgtga aatagaggac 300
agtccatgcc ctgattaaat tcaaagacag attccatga aaccatttg acaatttgt 360
ccagtcgaag aagatagata tcaactcaat acagtagtat tgcac 405

<210> 4347

<211> 415

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-035-Q1-E1-A5

<400> 4347

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gcgtccgccc acgcgtccgc ccacgcgtcc gcccacgcgt ccgcccacgc gtccggcaag 120
aaaccgatgc gcaagtagtt catctcattc agccttccaa gttgtcccaa atattgaaaa 180
caacactgac gggtgtcta tatattgcac tattactgc gagtgatggt tctttggtag 240
caggtgcgaa taatcctaca aaggaaaaca cgtcaaacac agagttgcct gagaacagtt 300
ggtcttctat cggagcgtta atagcagggaa cgtggtcagt gttggaaagat cgtgctagaa 360
actcccatat gggtgagtct actggagatg agtaccttct cttggattgt acaaa 415

<210> 4348

<211> 377

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-A6

<400> 4348

acccacgcat ccaggcaa at acggaaagc agtaaaagaa gaaagagaaa ggaaaaaacc 60
tgagtaccag gaaaaaaaaa ggaattaaat aaggaaagaa gggtcaagga attagaatta 120
ggaaaaggat tatggtgaat gaaaccagga aattatttga ggagaaaatg tgtaacgcct 180
acctttgca taatgtccca ccgagtgaaa gaggaagcac aaagaaagaa aaagaagtat 240
ccacataaga cccgaagcta gatgatctt tgctgtccaa acgaagtatg gctgaaccac 300
tatctgtgga aaaagattt ttagagatgg cataatgggt gaaaagccac tcatacgctac 360
tgataactgg tactcct 377

<210> 4349
<211> 420
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-A7
<400> 4349

attccccggc cgaccacgc atccaatccg atcacctagc gatagtttg tgtgtgaaat 60
agagtccctca caaataactg tctatcaatt gaaagagaaa attagagaga aaaatccccg 120
gtggactcct gctcgacaac gtttgagcgt ccaacaacaa gactcgaaaa gaatcattct 180
tgaagacaac caaacactgc aaagctatga tatcaaagac aacagtgtt a ttatatgaa 240
agacttgggg ttacaagtgt ctggaaagtt ggtgttttc atggaatatt tacgtcctct 300
cgtcatcggtt cctctgttat cttacaacc aagcttgatt tattctccc gttccaaagc 360
acttggaca caacaaaaga ttgccgtggc cgcttgggtc cttcattatg ccaagccaaa 420

<210> 4350
<211> 395
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-A9
<400> 4350

acggtcggaa ttccgggtgg cccacgcgtc cgccgattac gaacctgtgt agtctatgca 60
gtaaaagaaa gaatgagtaa gaaaaaaaaagg agtcattcca ccaggggagt aaaggcgcaa 120
gaaagaaaacc caaagcaatt gacggaaatc ggaaaaaggg gtggatcacg taaattaatc 180

cgataaaccg agaaccttac ctctccaaga aggtgttgca cggctgtcga aagaacgtgc 240
tgtgaagtga gagaacgtac gagaaagcca agtgaggaaa agaaggcaag tagagggcgg 300
cccgagaaag gagagggcgt aagacgtgat acagagtacg aagaaaagag aagagagcta 360
gaaaggaagt aaaagaagag taaaaggact agaag 395

<210> 4351
<211> 220
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-035-Q1-E1-B10

<400> 4351

ggtcggagtt cacgggtgga cncacgcgtc cgcccacgcg tccgcttggc agcagttgt 60
cattcaacat catcaaatgc caaaggagg aaagaaagat tcttcaaaga aagaagccac 120
aagtaaaccg gaagcagcag atgcaacaag gacaacagaa aattcgggtc cggaagcaaa 180
gttgaaggga acgggtgcaa agaaacatta aaaagttgac 220

<210> 4352
<211> 328
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-035-Q1-E1-B12

<400> 4352

acccgtccga gatggcataa ggggtgaaac gccaatcaaa gctagtgata cctggtagcc 60
ctccaaaacc aaaataatta ctttatcaag aaaaaaaaaa ggtaaaggaa aaaaaggaaa 120
aaacaaaaag gaacaataac caaaaaggtg aatatccaaa aggaagaaac ccaaaaacca 180
aaaataaagg tacaagagta nacatataaa gatcaagata agaagagagg gtacgcttag 240
aagcatcaca ccatatagga aagcgtaaa gcatgaaaga aaataaatcc gaaaaagaag 300
agaaaaaggt aagaaagagg accgaatc 328

<210> 4353
<211> 404

<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-035-Q1-E1-B4
<400> 4353

cccacgcggc cgaagcaagt ctatgttac tcctttattt gagaatatac ccaatattat 60
gattgccggc aaccatgatc gatatacccg acaaattgcc aatttgctgg aagaatattt 120
tggagattat ctgcgagggtg gaaagcaatg ggacgctgga aaatgaaaag aggaggagat 180
gaaagacgt gcatttcccc gagtttatga ccacgcgaga tggttgggt tgaaaattgt 240
tgtattggat caagttgggt attggagaga cagactacga ttgaaccaat gatatgtggt 300
tgtgtaaatt aggcgagacc taccagatgg tcatttgggg agaattccgc accacaattt 360
caccgatttgc agcgactatt ttaggaattt gatgcgtctc gttt 404

<210> 4354
<211> 428
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-035-Q1-E1-B6
<400> 4354

attcgcgggt cgaccacgc gaccacccac gcgtccgagt gtttcgtctc cacggagaag 60
acaccgtcat cgccgacact catattctcc ttcttattct tcttctatgt cacgttcgga 120
ctcgtattat tcttctgatt attctagaga ctattctcg gattcgcgtt cgtatgatag 180
tgcttagtcgt tctaccgagt cgtctcggtc gcctcgttagg agaaagcgca gtttattcacc 240
cagtcgttcg gactcaagaa gtttattcggta tgcgtctcg tctcctccac cgacatag 300
aaggagacga gcaagtccga gctattcgag gtcaccgtcg cggtcccttc gttcggtatc 360
ccgttctcct cgttcgggtgt cgcgttctcc tcggtctaga agcttggatc gtttctctgt 420
tggaaaaac 428

<210> 4355
<211> 412
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-035-Q1-E1-B7

<400> 4355

aattcccgaa ccgacccacg catccagaga aagagaattc gagaaaagtt gaaactactt 60
caggatgata ttgttagaggt aagaatattg ccgagcaact ggctcggtgg acaaggtttc 120
aacaagcccg ttccgttgct tgttacgtga gttttccaa agaggtggat accaaagaaa 180
tactgagact tggatcgaa tcgaacaagc gatgtttttt accgagagtg gaagaaagtg 240
accacttgac attttatcg gcagatagct tggaaacaaat atattcttgg gaacctaatc 300
gttggaaat acgtgagcct ccagttacac agccgtact ttgttacaa cgagaacctt 360
tggatatggc catagcccc ggtcttgctt ttgatagaat gggacataga ct 412

<210> 4356

<211> 290

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-C10

<400> 4356

cgtccgcggca cgcgaccggta caagtaaga agactgtgtt acctggcac aacggagaag 60
ttgttgttgg aaatacttta acagttacta tggactgtga tcattcgatgt gtggatggcg 120
cagttggc aagatggttg aaaacttca aagatatcat cgagaagccc atcaacatgc 180
ttcttaatg acgccatatt ctgttatga ctaccgtttt ctactgaagc tggcgccccc 240
atttcaaatg tgcctttgtt aaagcagctt actggactttt accagaaaaaa 290

<210> 4357

<211> 472

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-C11

<400> 4357

gtcgaccgac gcgtccgggc aacctaaccg aagattcctt cgaatctctg gctgggtata 60
tttttcgtat gaagaagact atactatttc ttgcactgg aaacagctgt cgctcccaga 120
tggcgaaagg attctgtaga aagttcgtg gtgtatggat cgagccctat tcggcaggag 180
tcgaacccaa aatgttagac agaagagcag ttgaagttat gaaagaagttt ggcgtggata 240

tctcacaaca aaaacccaag tccatccaag aattaccaac caaagacttt gacttagtg 300
taactgtttg cggcacgccc aacgagaatt gtccacttt tccaaacaag acaaaaagtta 360
ttcacgtcgg ctttgaagat ctcctcttc ttgcaaagaa ctgctcaaca gaagaagaag 420
cattggaagt ttatcgacga gttcgatg aaattcaagg gtttatccaa ac 472

<210> 4358
<211> 413
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-035-Q1-E1-C12
<400> 4358

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agttctgagg atatgaatga gcattccgt cttcagttgc aacttttgg ntgggaagac 120
aacgaacata tcaccgacca agttgtgata gcggttggta tcacacctcg ccaagagttg 180
gcagaacaag caaggttaga aacagatccc gttgctggtg gtattcgcgt caatgcagcg 240
atgcaagtgg aaggtatat ttatgctgca agagatgtcg caagttctg ggatcgcgct 300
ttgggttagac gtcgtgtgga acactggat catgcactag tcactggtag aattgctgg 360
gagaacatgg cnngaggaaa tgtaacttac gactggaaat ctatgttctg gtg 413

<210> 4359
<211> 406
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-C5
<400> 4359

attcgcgggc cgacccacgc atccacccac gctccggta agccgctttt agtgaactct 60
tttctatggc tcctgttacg acgcctttgt ttggcacttc ccctaaaact accaatcgag 120
aagttgagca ctggatgaac aacctgaacg aagttcaaag tggattcgt tcggcgaac 180
caaagttaaa cagcactggg ggaaagtgg aaggctgtgc tcaacacgta aaggaagttt 240
cagacgaact tagtcaaatt tttaacaagg aagaccctca ttttgacgac attgtcgctg 300

gagtaaactc tggttagaaag tttgaaaaca gtc当地actga aatcgccaag aatgatgtgg 360
taagagagag ggcactttag aggttgaaga agtacagcga cgagat 406

<210> 4360
<211> 390
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-C6

<400> 4360

tgc当地aaaa acaaaacttgg tcctctttgc gataatgatc caagtttat cggaaaattt 60
caggattatc tagcgcttct agcatatgaa gatccagaaa agtcacccga gtttcacctc 120
atgtcgttgg aggaacgcga tagaactgcg gaagaagtca atggttgtt ggttaacttt 180
caagtgtatt actcttttagg tcttcttgaa aggtttcgt tattggAACG actgattcgt 240
cagctgggag tgactatgaa cacattatct gaactttccg attccaacaa ggaaaagaaa 300
tggagcttac atgattatgt tatttgagaa gatatatgtt ttgtaaacga acaagaagct 360
ctttctactt gggaaaataacc agttaatccg 390

<210> 4361
<211> 457
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-D11

<400> 4361

cgtccgaaac ttgtacatcc tttttgggtt ggaagatggg agggtatgaa aatattgaac 60
gaggtcctct aaggctgaag actggattta tgaagaaaaa gaagaaaaaa ggcaaaagtt 120
aagagcagga gactccgaaa gtcgctgttag gaaagacgga agcagagaag agttcgaag 180
aaaagaaaaag acaaactgtgag gaacaaaggt tgaaagagga agcacaactt tcttaccgtt 240
ccaagataga aaaatttaac gaacagctt gagaagaacc agaacacttt gacgttccaa 300
agggtgtcccc aacaaagtaa caagagttgc gacaacattt tgcaaaatat cagaaaaggt 360
tccttcaaaa aagaattgca aagacgtaag tttaagaaaa ctttgggtta acaattttcc 420
aaacaatccg aagcacgaac aataatatac tcctccc 457

<210> 4362
<211> 383
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-E11

<400> 4362

ggtcgcccga cgcgccgccc cacgcaaccg cccacgcgtc cggttaagatc gtttatggt 60
ggctgaggac ttgaccttgc agttcttgc attttttct tggactcaga gaacactttt 120
caaacacacc tgtaaatgtt cacaacataa attcacgagt cttccatgca gagtatcgtc 180
agcgaaatta cctgcgatac ggactttcc tgggttacc atgggattga acgactcgta 240
cagagaacga ctaagtatat tcgatcttac cgtagaagaa gtcgctgaag actacggcct 300
acctttggaa tacgtcatcg atgtacttat cagtaatggt gtggaagaac ctgtataaccc 360
taacgacgtt ctgtcaagcc gag 383

<210> 4363
<211> 413
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-E8

<400> 4363

aattcgcggg tcgacccacg catccgctta ttctcggttat tttgttaact tttgcactag 60
tcgaagctgg aaagagtccc aaaataacag atagagtata tttggatatt caagtcggtg 120
acaaaccttt gggaggatt gtcataggct tattcgccaa tacaacaccc aaaacagtag 180
aaaactttaa acagcttgca acccatgaac acggatttg ttacaaagga agtaaatttc 240
accgagtgat taaaaacttt atgatccaag gaggtgactt tacaaaggga gatggcacag 300
gctgaaagag tatctatggc gagcgattcg aagatgagaa cttaaaata agacattccg 360
ttccaggacg tgtctcgatg gctaattgcgg gaaggaatac aaactgctct cag 413

<210> 4364
<211> 397
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-035-Q1-E1-G6

<400> 4364

attgnccgggt cgacccacgc atccagcgtc cagtatgaaa ggagaaacga gtgttagact 60
gtcttagtcgt ccaactcagc gaaacagcaa taactgtgaa aatgcagtaa actagcagta 120
ggacggaaag accccataat tcttgactag ataggtttag ggaggagaga gaatcatgaa 180
gttagaggagg tgggtaaga gatgaaagac cactgcatga ggataaggaa tctaactgag 240
taagaaaaat aagcttaagc tagttggct ggggaagtaa agcctaagaa agagtaaatt 300
aggcaagcaa aggcatgaga gaagtataat agcagaagca tgcttgaaga aaaagaaaga 360
gatttcagaa aggaaagaaa agtcagctat agagaac 397

<210> 4365
<211> 448
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-H9

<400> 4365

gtcgaccgac gcgtccgccc acgcgaccgg ctgctgctgc tgcatggaaa gaattgtagg 60
cggtgatggc ttggtagaaa cgacgcgaag caagttcaac tgtacttgcg tgtgtgtatt 120
caatggaata agtaataagt gttgattggc cttgttaactt tggtaggta tgtaaacaac 180
ccttgatgtc cgtcaagagg ttgatgaaaa aaatcatgctg cgtcgacaga agtggtagcca 240
tctgcgtgtt ttggtaggcg atatgaagat gccttgctaa gctgactctt tcattcgtgct 300
agagttgtgc tataactttt taaaacttgt tttaaccgtt gttgagacta ggtttgttgg 360
ttatgggt ttttatata tatatatata tatatatata tatatataga gagagagaga 420
gagagagaga gagagaggaa gaaaactg 448

<210> 4366
<211> 422
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-A10

<400> 4366

cacgcgtccg gtagataccc ggtggggatg agcagaacag taagcggagg aaaagaaaacc 60
agtggaaatt cccctagtag gggcgatcga agcgggaaga gcccaactatg agaaacacct 120
ttttcttgg agaaaagagg agatgtattt gatacaagac aagaaatatc tgcaagaaga 180
agtagagcaa atttcctgta atggaatatc atggatggtg agaagccgt ttatctctt 240
tctttgtatg gaagctgcgt tacgatattt cttgttgtgg agtcgggttg tttggtagta 300
cagccttaat tttgtgggtg ttatcaatca tccaaggcta aagacgtaga ccgagaacct 360
tacctctcca agaatgtgtt gcacggctgt cgaaagaacg tgctgtgaac tgagagaacg 420
ta 422

<210> 4367
<211> 266
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-A11

<400> 4367

gagtcgtatt aggatgagca taacagtaag cgttaggaaca taaactaatt ggaattcccc 60
tagtaggcgc gttccaacag gcaaggact agtatgagaa cactcttta cttggctta 120
agaagaaat ctactgtat acaaaacact gaatatccgc aacaagaata gagtaaatta 180
ccagtaaccg tataatcaata atgttagaa gcccatattag ctctttctg tgtatgtcat 240
ctacgttacg atattctta ttgtgg 266

<210> 4368
<211> 481
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-036-Q1-E1-A12

<400> 4368

ttcgcgggtg cgcccccacgc gtccggataa agtataact ctgttatcga gaccagatgc 60
tccatcgctc cttaaagaaa aaattccagt cgatgttct aagaaaagta ctgtggcgtc 120
ttcaacgaaa ctgcttcca atgaggattc aaaatatcca acgcttcctt ctgttcgaat 180

aggctcggtta gctggtcctt taagttcctt tggagatgaa aggtgcatacg acttgtatcg 240
actgggtcaa cgattgcagt tggatgtaga tgacctttat cctcttttag aagctggagt 300
tattctaaat atactcaaag taactgaggg agatgttatg ttgacagatt caaggagtcg 360
attttcctgt tgcgtctatt gatgataaga agagcatggt acgagaagct ttattgcagt 420
cgggaggcgc tcggttgatt caacaaattt atcggttgct tcaacannac aaacgagtgc 480
a . 481

<210> 4369
<211> 374
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-A3

<400> 4369

cgggccgacc cacgcgtcag agacacatca catatcttcg gaagaagtac aacatataga 60
aaagttgaag gagcgagacg atgaaagacg tagagaagaa gctattgcaa agttgaagga 120
agtcggaaat agtgttcttg gctatttgg cctcagtgtc gacaacttca agtttagataa 180
ggatcctgcc tcaggttcat ataacatacg actagaaaag tagatttatt acaaaaatatc 240
ttaactactg taaaaaaactg cgctacgata tttcttggta tggaatcggg ttgtttggta 300
ataaaggcctt aattttgtgg gtgtataaaa tcatccaagg ctaaatacgt acagagagac 360
cgatacgaa caag 374

<210> 4370
<211> 282
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-A5

<400> 4370

cgagagatcg cgacgcaga gtgaagatgg aacactggag tccttacaaa gacgaacttg 60
tagctacagc aaaggcgctg gtaactcctg ggaaaggaat cttgctggg gatgagtcta 120
cggcactat aggaaaacgt tttgcttcca taaaggtgga gaataacgaa gaaaatcgca 180
ggagctatcg ggagctttta ttcactactc ctaactttgg tcagtatatt tcgggggtta 240

tcactttga ggaaacgtt gatcacagga ctagtcaagg aa

282

<210> 4371

<211> 426

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-B10

<400> 4371

taccggaccg taattcgcgg gtgcgccccca cgcgccgg attaatgatg ctttgtttt 60

agttttacca ggcttatacct ttgttattac tggtaatcgt atattctgta gacgctcgga 120

cttgaatgaa acggaagcat tggagtcctg ctttcgttt atgaagatata gccccacgta 180

caagtcgttg gagattcttt tggaggcga gcaaatttat gtagaagaac tcgtgcctat 240

tgtatttcgt ttcgttgaag actttttca tttttttt gacaatttga aaaccgtaag 300

ttacggctct ccctcgaaga aggacctaca gtctggttt tggagagagc aagcgcaaaa 360

ctggattcgt tctttcgtc agctgtacac agaagtggag ttatttatga agatggtaaa 420

tacgat 426

<210> 4372

<211> 58

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-B7

<400> 4372

attccggggc cgacccacgc atccacccac gcgtccgccc acgcgtccgt gttttctt 58

<210> 4373

<211> 168

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-B8

<400> 4373

acccacgcacgc ccagccacgc gtccgcccac gcgtccgtgt attcttaagc aaaaacatca 60

ggtacaaaaat cagattctga cagttttgg aaaaggatga aatcgactca actttgtcgg 120

gtgcgtcggtt tcttagggtg taatacttat ctatgatgtg cgacttca 168

<210> 4374
<211> 454
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-036-Q1-E1-B9
<400> 4374

ccacgcgacc gccaacgcgt ccgagcagca aaccagagag gaaagcgtta aagcatgaga 60
gaaaagccgt actgaagacc gacacaggtt ctcgaggaga aaggagaccc aaattaaggt 120
gagagaatgg acgataagga actaggcaaa aggatatggt atctgcggta gaacatatga 180
aagaagcagc accgactgtt tagcaaaaac acagcactct gcagaaaaga gaaaatgtaa 240
agtatacgat gtgcggcctg ccaaatacgta gagaagaaat cgatgaaagt gaaagcgtgt 300
aaaagatgag gtatagagaa tggcggtcct aactgttaagg atccaaaggt agcgaagtaa 360
atagacgttt gaaaggcgtc cagtatgaaa ggagaaacga gtgttagcact gtctagtcgt 420
ccaactcagc gaaacacgcaa taactgtgaa aatg 454

<210> 4375
<211> 424
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-036-Q1-E1-C1
<400> 4375

cgggtcgccc cacgcgtccg atattatttg tgcttggaca atggttgcaa agactgctct 60
gagttgcctc tttctctctt tccttatcgc tgccgcagtt gcagccgacg tagttcaga 120
ggagagatgg ggatatgctc agcaaaccctt acaacacgcaa cagtgcacac aagtatgtaa 180
acagtatgca tactatcaga gtccagtcgt cacttccgtt accacacaga gcccatactg 240
gacccaatgc tcgaagactg tgcaaaccctt tgtcccaagc cagtgcagtt cttataccca 300
atctcctaca tggacctatt gcagcaccta caccacccat agcgtaccat ctcaatgcag 360
caaggccgtg actacctata ctcaaaccctg ctgtgcttat gccccacaaa cttcctatgc 420
agtc 424

<210> 4376
<211> 469
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-036-Q1-E1-C11

<400> 4376

gggtgc~~cccccc~~ acgcgtccgg catctatgct cg~~tcaacat~~ ggctttc~~ttt~~ atacaggaaa 60
agatatttta tattcaggaa tgacaggaga g~~cattacaa~~ gcttatgtat ttatgg~~tcc~~ 120
catttattat cagaaactaa agcatatggt aaaagataaa atgcacgcca gagccagagg 180
tcctcg~~tgcc~~ gtactcacaa gacaac~~ctac~~ ggaaggccgt tctcgagatg gtgg~~tctcg~~ 240
attangagaa atggaaagag attgttgat ag~~gat~~atggt gcttcgatgc tcattatgga 300
aagattgatg cacagtagtg atgctttat tgctcatg~~tt~~ tgtagacaat gtgg~~ttt~~gat 360
tg~~ttt~~ccaaa gattgg~~gtc~~ caac~~tgtgc~~ aagtgc~~tcta~~ tatataaggc cattgaaaat 420
tccttatgct tgcaagttgt tg~~ttt~~caaga gttgcaa~~agt~~ atgaatatt 469

<210> 4377
<211> 461
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-C12

<400> 4377

taccgatccg taattcgcgg gtgc~~gc~~ccccca cg~~cgtccg~~cc aacgcgtccg g~~aaa~~atgaag 60
tttgtactcg tttctggcgg g~~ttt~~tatttct ggtattgaa agg~~gtt~~cttac tgcttc~~atct~~ 120
ttgggag~~ttt~~ tgctaaagtc gtgtgg~~tt~~gg agagt~~gac~~aa g~~tat~~caagat tgatcc~~c~~tac 180
atcaatgtcg acgctgg~~tac~~ aatgtcac~~ct~~ tttgaacatg gtgaagtatg gtgctcgac~~g~~ 240
ttgtttgtac aagaacttca tttatctaaa ggtctttgta ctggatgac~~g~~ g~~ccgg~~cgatgt 300
tgatttggat ctcggcaact acgagagg~~tt~~ tctggacatt aatcttacga gtgaaagcaa 360
tataaccacc gaaaaattt atcaacaagt tattgaaaaa gaaagacaag gactgtatct 420
tggaaagac~~g~~ gttcaagtca ttccacatgt aacggacgct a 461

<210> 4378
<211> 453
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-D11

<400> 4378

ccacgcgtcc gccaacgcgt ccgcccacgc gtccgaaatg tctcacgcct tggctgttt 60
cttattcctgg acaacaactt tttaaaaacg agattatttt taccaaataat aagcatttt 120
cagttgcttc tttaaaggat ctgagtggtg ttgtgcagag ttgcaatagt gttcgtgcga 180
gcaaggcaaa tgtgtcatta ctctcggtt ccaagtcaag aaaacccaaat ggaaagcgac 240
tgttgcacaa cgccatggct gcttcgagtg ttgcctcggtt tggagatgct tggAACGTTG 300
ttactctcac ttatgcaagt gtcattgcag ctggagggtt gactggttat gtaaggactc 360
gaagtgttcc ttctctgtta tcaggtgtcc tatccgctt attactttc gtttcttggt 420
atcaaaaattc gcctccactt gcctgtgcag tat 453

<210> 4379
<211> 461
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-E11

<400> 4379

ccacgcgtcc gccaacgcgt ccgcccacgc gtccgcccac gcgtccgctc atttaagtaa 60
tggagagagt ttggattttt ccgtcattca aaagaacttg ttAAATGCTT atgttcgaaa 120
gaaaacacat attcaacgct cagaatggta tcatgctcggt gcataaga ttattcattt 180
gtcaaaaagaa cagatgccaa gactttcac ctctgcagtg gatctcagtg acatttattt 240
agagtttgta gagttggaaa acccctttgtt tatgcattt ggaatttctg ctgtacaaaa 300
agttcatcag agtattcgcc tacttacaaa agtgttattt gaacgtgtgg actgttagttt 360
agtgagtggtg gttcacccaa atccagagac agtgatagca ctgtatcggt tatatggcaa 420
aggccgtttc ttgggtggaa gagtgcagta tctgagtaga a 461

<210> 4380
<211> 426

<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-E2

<400> 4380

acgcgtccga ggaaatagtc atccacgaca accattggat gcagccgatt cgtggagaca 60
tgaactgtga tagtgagat ctttgtgaa tggaaaagat gacaaaataa ctcaatcaga 120
ggctcaattg tgctcggttcc aagacctgat atgtctggtt gtatctaacc aggcaaagac 180
aagtctggtc caggcgaaaa catggttga tgaacaaact gtgagactat gacagtttgt 240
atccgcacgt caatccacag gaacacgaga gtatctggac actcgatca tgccctcga 300
ttaagacgc cggttagatg acattaactc gactgatgat agtagtcgac agagagatga 360
tacagaaaaat cgatgtgcgg tctacatgca tgactcggtt aatcggtttg tgaaacgaga 420
aaatga 426

<210> 4381
<211> 383
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-E8

<400> 4381

gaccacacgca tccaa 60
aaaaaaaaaaaa aaaaaaaaaaaaa aaaaaaaaaaaaa aaaaaaaaaaaaa aaaaaagggg ggcggcccta 120
caggttgc tc ttctttac tcgtgctggc ggcttcatcg ctcttcgt cggtccctat 180
tttcatctct tcggccgtcg ttttataacc tcttaattgc gattccctg ccgtcggtt 240
ccttattcgc ctggggaaa atccccctt ttccaatttgc cgtcttattg acgaggaccc 300
cccccttggc cttccaaa atttccttac cccattggc gattggcatc ccccctgttt 360
cgtcgcctta atcgccgcgg gtg 383

<210> 4382
<211> 410
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-F12

<400> 4382

ccacgcgtcc gacaagcgtt cagaagaatt tggtaagag agggccaaga tggtcactc 60
tatggaagta aagaagaata agtttataga acagtggct gcctatagag aaaactctga 120
atatttatac aaatggacac caaagcgtt aataggaatc ggtcttcttg tggcggtat 180
tccttattac ttgtatcgct acattgtgta cagtgtggag aatcagtacc caaactatgg 240
agctgcagag tatggttac taggagggttc tcctccaaag tactcgagtc aagaagatga 300
aaataagtaa ctgacaacg tcaccaacga cctaaagttt ctccgttggc gtattatatg 360
aaaactttat agacaagttt attttttcc ctaaaaaaaaaaaa aaaaagatca 410

<210> 4383
<211> 493
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-F9

<400> 4383

taccgatccg tacttcgcgg gtgcacccac gcgtccgcaa acagaaaaagg aagtaaaaagg 60
agggaaatgaa gggaaagttat ggcaaaaaca cgtgccagca gcagcggtaa aacgtgtgta 120
gcaagcgttag agcagaagaa ctgggtgtaa aggtcgagta gtagagtaag tgtaaaaaggg 180
aaaggaaagg agagaaagag gaaagggatg aaatgcagag atctctagag aaaggcaaga 240
aagaaaaagaa aggaagacac agtaaatgag gcgagaaagc ataggaagtg aaacggatta 300
ggaaccctgt tagtctatgc agtaaaaagaa agaatgagta agaaaaaagg gagtcattcc 360
accagggag taaaggcgca agaaagaaac ccaaagcaat tgacggaat cgaaaaaaag 420
gggtggatca cgtaaaattaa tccgataaac cgagaacctt acctctccaa gaaggtgttg 480
cacggctgtc gaa 493

<210> 4384
<211> 483
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-036-Q1-E1-G11

<400> 4384

taccgatccg taattcncgg gtggccccac gcgtccgcca acgcgtccgc ccacgcgtcc 60
ggaatgacct ttgaatcgcc ttttacaag acaaagctt cattaaaag caactcgttg 120
tttctgcaaa cttcttactt tgtggcattc aacgaacgat gaagttccag tacgttagtc 180
ttttattggc tctcttatgc gtaggttctg ctctggctgc tgaattggca cctggaattg 240
cgaaaaaacc ggttagagaga ggatatgagg aaccctgctg taccgaatat tgttattggg 300
aagaaatatg tatcacaccc acacccacac ctacaccaac ctactattac tattattacg 360
caagaaatgc aaaacaggaa aatgtcgaga gaagcgtaga aaagagtatc tcttccgcag 420
aaaaaatctga tgcggttcga gggtatttc ccacgtacta ctattatgag actcctaaca 480
tat 483

<210> 4385
<211> 384
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-036-Q1-E1-G4

<400> 4385

acgcgtccaa ccaaacgtcc gcttacctct ccaaaaaggt gttccacggg tgtcaaaaaaa 60
acttccgtga aattaaaaaaaaa acttacaaaa aacccaatta aggaaaaaaaaa ggcatttaaa 120
gggcggccca aaaaaggaaa gggctaaaaa cttaatacaa attagaaaa aaaaaaaaaaa 180
aacctaaaaa ggaggtaaaa aaaaagtaaa aggacaagaa gacgtacgga attcacgaag 240
aangagcgtg aatgaangaa gaatcccaag taatcganga agaaaaagct tcggtgaaag 300
cgtgaacgga ttttgcacactgcccgtc aagttctgga agtgtgctac gaataagcag 360
gagaagtaga agagagtang aaaa 384

<210> 4386
<211> 426
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-G6

<400> 4386

ccgggtcgac ccacgcattcc aaagaaaaaga gagagaagaa agaaaagaag agaaaagccg 60
tactgaagac cgacacaggc actcgaggag aaaggagacc caaattaagg tgagagaatg 120
gacgataagg aactaggcaa aaggatatgg tatctgcgtt agaacatatg aaagaagcag 180
caccgactgt ttagcaaaaa cacagcactc tgcagaaaag agaaaatgta aagtatagag 240
tgtgcggcct gccaaatagt agagaagaaa tcgatgaaag tgaaagcag taaaagatga 300
ggtatagaga atggcggtcc taactgtaag gatccaaagg tagcgaagta aatagacgtt 360
tgaaaggcgt ccagtatgaa aggagaaacg agttagcac tgtctagtcg tccaactcag 420
cgaaaac 426

<210> 4387

<211> 469

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-G9

<400> 4387

gggtcgcccc acgcgtccgc gaaaatggac cactgtttgt ggttttctt ctcgtgttct 60
ttgattttct gtactgtctt ttaggtttt ttatatttac catggcttta cggagaccga 120
aacgatttaca aaataataaa aaggaggagt tttgctatgc tcgtccttgc ggcactatgc 180
tattgttta ctacgcaat tgtcataccc cactcgttt tactaattga aaggatggag 240
aagcccccga gtatatctct gtccactaca tttgtcttct catttttacc tgttttgctt 300
ttgtttctgg gaccttgcac tttgaacatt attgatttttcaacgtatat ggcgcacggc 360
ttgtccgctg aagaaagctt aaagctgtcg tttcctttgt tagggcagag ttccctggata 420
attttccgca accttatggt tgctccggta tccgaagagt tggtgtttc 469

<210> 4388

<211> 492

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-H11

<400> 4388

tacccggaccg tacttcgcgg gtggcccac gcgtccgcca acgcgtccgc ccacgcgtcc 60

gcccacgcgt ccgatcctgc catcaatggt ggtgatatct acaactctcc tatgatacga 120
gagaaaacaaa tacttcgttt actcggaaca atgccaactt tggcagcttt tatttatcg 180
cacaagggttg gacgtccatt caactatcca gcttatggtg gaagtgcgtc ctataccgaa 240
aactttatgt acatgttgga tagtatggat gatccttctt atcgccaaa ttcaaccctt 300
gtgaaagctt tggtatacttt gtttgtttg catgcggatc acgagttgaa ttgctctact 360
gcggcagttc gtcatctcac aagtagtggt gttagatgttt ttactgcatt ttctggggct 420
gcaggtgcct tatatggacc acttcatggta ggagccaatg aagccgtttt gcgaatgttg 480
gaaaagattt gt 492

<210> 4389
<211> 149
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-H3

<400> 4389

caagccttcg aacaagcgtc cggccaagcc tccggccaag cgtccgggct aattccaaat 60
tgccaacggg cgctccaaaa gattcaagcc taagttcgcc ttcaagccaa gttaaaactc 120
ctccaaaaatg gcaacccaaaa tcaatttaa 149

<210> 4390
<211> 446
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-036-Q1-E1-H7

<400> 4390

attcnccgggc cgacccacgc gatccacaca cacttgtcc ttccaaacat gtttcatttc 60
cttcttctta ttagtcgtca aggaaagggtt cgtctagcca agtgggttggaa accctactcc 120
cagaaagaac gaacgaaaat ctcccaagag ttggctccc tcttaaccgc gaggtccaaat 180
aaaatgtgca actttataga atggagagac ttgaaagttt tttataagag atatgcaagt 240
ctcttttcg ttgctggagt agaccctacg gataatgagc tgattacgtt ggagataatt 300

caccattatg tagagtgttt agacaaatat ttcggaaatg tgtgtgaact tgacttgata 360
ttcaacttta gcaaagcata ttatatatgg gatgagat tattggctgg agaacttcaa 420
gagtcgaaac gagaaaacgt attgcg 446

<210> 4391
<211> 480
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-036-Q1-E1-H9

<400> 4391

gtacggtccg tacttcncgg gtcgccccac gcgtccggaa aaagactgcg tgaggagggaa 60
tggcttgtgt ggatctgctt ggatgttttc gtacttttag ttttgtgtcg tgtcggacaa 120
gttggataca tacaagacaa acgactctt ggaatagagt gaaaaccaag tccgtgtgc 180
gtacttgtcg acaagttgt tccatgaccg aaaaacttagc gcccctaaca acttgttgg 240
cacccaacaa cgtcacatca tcggtcgaaa agtccatttc gatatccagt tataatatgt 300
tggctcaagt ttacgtaaat acgactcagt ttccatatttgc tcccaagg tacccatcgac 360
gcaagcacag attggccctt acaaagaatc tattgcaaag tttacaagtg gatattctct 420
gtttacagga agtagattgt tacaatgaaa tagaaacttg tctgagagaa aaaagggtac 480

<210> 4392
<211> 423
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-037-Q1-E1-A10

<400> 4392

gggccgagcc acgcgtccag caaaaactgct agaatgcgtg aaattggaac ttgcgttacc 60
tttttatggaa ggagtacttt ttacgcaagt tgaaaatatc aagagaggc attttattct 120
agataaggca gagtgtaact cttatatggaa cctggaccag gatgactttt gggaaacctcg 180
gtttacagct tgtacaacga ggagaattgc ttggtcttgc gtagcatagc tcagttttaa 240
agcacttttgc aggtccgctc ttgtatatgc ctggatatgtactttca ctattgctt 300

gggtanacac tggacggtta tcgatcaag aggcaagg ttgg caagcttttgc tcattgtttt 360
gaaagtgtc accttatatac aaaacgtgat agtcaaacc aagactaagcg tacattcaaa 420
cac 423

<210> 4393
<211> 399
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-037-Q1-E1-A12

<400> 4393

acgcgtccag gtcaatccag actctatgga agaggaagtt gatccgttc ccatgttgac 60
gaggaagcac tttgaagaga gtagtgaagtt tgcaagacgt tccgtAACCG atgcggatgt 120
gcgtcgctat gagatgtacg cgcaaaacat ccaagctacg agaggattcg gtgggtggatt 180
caagtttcc gatacacacctt cctccaacaa tcaaggtaac accgggtgacg aggtatctcta 240
ttcgtaagag aacggttcac gaatctgtgc agtttattga tgtgtggcgt tttgttggaaa 300
taaaaatttg ttttagtttag ccaaaanaaa acgagacttg aagaaacttg caaatgcaag 360
aataaccaaa ataaggataa attcagaaaa tgaagaagc 399

<210> 4394
<211> 248
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-A9

<400> 4394

aagggtggaca cgcaagtctg gtcagttgt tcgaaaggac caaccaagct cacaagacct 60
ttcagcttgg aggtctatgg gagaaactta ttatcctgag cgaaagagtc aagaaacatt 120
agacgctgaa gaacttcaac aaaggaagag catgaataag tcgagttcg aacgaccaaa 180
agaaaaatgtt gcagctgcat catagtttag tttgtttcta tcataaactt attattcaac 240
gtgaaaaaa 248

<210> 4395
<211> 432

<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-B10

<400> 4395

cgcgtccagc tcaatgatcg atggaagaaa agagtgaaga cttgtggat aaggaactcg 60
agtccctgtt gaaagaacga gatgctattt tgaatggaac aagtgaagaa tacttgagtc 120
aattggcgcc ttttagagaat gaaaggaaac gttaaactcga tagagctatg gacttttatc 180
aacttcaact acaatatgca gaacagctgt atgagttggc caagaaagaa gcataatgata 240
gcttcaagc acaaaaaggca gaacaaagag aatatatgtg gcgtattaag ttggaaagag 300
aaattacctt gagactctta agattatcca ttccatttaag ggacccaaac ggacaagtga 360
ttgttaggaac ctttggaatg gaaggcttg tgaatcttat ctatcgcaat cgtttattcg 420
aaaattgttc ta 432

<210> 4396
<211> 433
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-037-Q1-E1-B12

<400> 4396

cgcacgcgtc catccatatac ttgttgttgc tggtgtgtga attttagtgc gtagaccaca 60
nagatgaacg gtgttagtatac ttccagggaaat atgggtgtata acacgcttgg aaaaagcgcc 120
ttatttagtat ctaaactatac ttttggctcc tgggtcactt ttaacgaaca agtggacgtc 180
gaactggctt acagcttgcatac gaaaagagca tatgaactgg gttgcaattt atttgataac 240
gctgaaactt atgcagctgg agcagcagag tctatcatgg gagaggcttt tcattcgaggt 300
gttggaaaggatc gcgtatggac aagagaagac ttgggtgtga ctacgaaaat atttttcggc 360
ggaaagaagtt cacggatac ccacacccctcc aaagggttgcatac caaggaagca tattgtggaa 420
ggactgcaag cct 433

<210> 4397
<211> 391
<212> DNA

<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-037-Q1-E1-B2

<400> 4397

acgcgtccag acaaagttgc tgcgaaatat tctgtggata gtcaatggta tcgaggagg 60
attcgtaaaa aggattcggt gagagacagg ttgttgggtgc aattttaga ctatggaaat 120
gaggaatggg ttgcataatga tgaagttcgc agtttgc当地 ttgc当地 acaca gaatattcca 180
actgctgcgt attgtgtgct tttgaaagat gttgttgc当地 cagagttgac agaagactgg 240
gggatggaag ctggagaggc tttgaaagat ttggtttggaa ataagcgagt tttggttcaa 300
ggcacgaagc gcattatgga cacggaaat agtcatattc ctc当地ttgt tgcatgtgt 360
tatgtagaag aggacaagca atcaaggaat a 391

<210> 4398
<211> 317
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-B4

<400> 4398

gcgtccacct taactctcca agaagttgtt gcacggctgt cgaaagaacg tgctgtgaag 60
tgagagaacg tacgagaaaag ccaagtggagg aaaagaaggc aagtagaggg cggccccgaga 120
aaggagaggg cgtaagacgt gatacagagt aggaagaaaa gagaagagag ctagaaagga 180
ggtaaaagaa gagtaaaagg actagaagag gtacggaatt cacgaagaag gagcgtgaac 240
gaaggacgaa tcccaagtaa tcgatgaaga aaaagcttcg gtgaaagcgt gaacggattt 300
tgtacacact gcccgtc 317

<210> 4399
<211> 379
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-037-Q1-E1-B6

<400> 4399

ccgggtcgac ccacgacgac caccacgcg tccggtgaa tgaaaaacgg ttgtccttga 60
tgaaaaagtg tcaacttccg gttctccctg aatacattga atctcaaatt ctggaattat 120
tagagtatgt aaaggatgtt gctgttgcta gaatggttttaagcgatgg aagagactcg 180
tggataaaaa ttcccaatttggagacgac ttcaaggctt tacactacca aaacgactac 240
caagtgaagc ggaaaaagtat agaaaggcag ctgaatgtgg gaatcgagag gcantggtgc 300
ttcttccttgcctt gctctattat tatggatatac agagtcagga tgccacagtt ttgtcnnnttga 360
cgtttcttcg aaatagtgt 379

<210> 4400
<211> 390
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-B8

<400> 4400

aattcccccggg tcgacccacg acgtccacgg acgcgtggga atttgatttag gcaacaagta 60
gagttgatga agactgaagg agttaatttgg gtatTTactc ctgaggctat tcgagaaatt 120
gctgctgttg ctgccgaagt caataccaat gtggagaata ttggagctag gcgtttgtat 180
accgtcatttgg aaaggattgtt agaagatatt agtttcaatg ctccggatttgg gaagggtcag 240
accgtgacta tcgatgcacc tagtgtgaaa ggttcttttgg gagatatgtt gttgaagaca 300
gacttgtcca agtttgtattt gtgacaggaa agagaggaac gatagattgc ttataaaaat 360
gtttatcgttggtttac ttttggaaaa 390

<210> 4401
<211> 379
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-C1

<400> 4401

ggtcgacgca cgcgcccgcc cacgcgtccg agagatttga gtatgacttt gctcgagata 60
tgatggtgaa agtgaatgtt aagttaaat tttatgagac agtcgacctc aatcgatttgg 120
tcgacagaac tgcaagtcag gaacaaaata tcgacgtaga aaacgacgac tatgtttatg 180

tttacatcc tggtagtt catgtggag atgttcatgg cggacattat tatgcattta 240
ttcgccgaa acctttgtcg gatccctcg tttggttcaa gtttgatgat gaaacagtct 300
taagggcaga taagacacaa gccgtcgatg ataacttgg tgttgggtgatgaagatg 360
agtcaccaga aaggaaaat 379

<210> 4402
<211> 424
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-C10
<400> 4402

gcgtccaaga ggaggaagcg aggttggaaat atttctatcg agtgaagcga gttaaagtata 60
aagataggaa cactgctatt tgcttacaaa atgaaaacgg accttgcct ttactagcaa 120
tagtcaactg tttgttggat agagcgagca tcgatatcca cgccgatatt tcttacatat 180
cttatcaaca gttggcagag cttaaacgg attattttt tcagacacaa agtagtgcgg 240
cacaggaccc caacttggaa caaatagttt tggacgtcgt tgggttatac ccgagggttga 300
gaacaggtat cgacgtaat ataaggtttgc ttagttgtga ctctttgaa tatactgttg 360
agttggctgc atttgatgct ttgcgtgc gtttggata attgacccaa 420
acga 424

<210> 4403
<211> 321
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-C11
<400> 4403

gcacgcgtcc agttggcct tgtgggtg atgccctgga ttgagctacg taatggcaac 60
tccgctgtct tgaaagacat aactgcaagt attgaaaagc ctgacataaa atggataact 120
aggacgaatc tcagtacttg tctgaattct gcagaaggaa atgttacggt tgacttgcg 180
cggcagtgtat gcttgaagga tatatttca ttgaagcttc tcgacaataa cttaagttg 240
gcgtgtttta atgatgcctt gtttttagtt ttaacaggct tatccttgc tattactgg 300

aatcgatat tctgttagacg c

321

<210> 4404

<211> 430

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-037-Q1-E1-C12

<400> 4404

gacgcacgacg tccacggaca cgtggggaaa ttttaatag ccaacctcca ggtgatgtga 60

ggtgtaatca tcatcgaaaa gtgaaacgag ttggcaatga gtgagtttgt gcgaccttgt 120

cgttcttg atagcggctt tggtgactta ttttcttggc cgaatgaccc cttcttcgt 180

gatgcatttga acttgataacc tcgagtaggt ggagctgagt ctcagttatg gtcgcccaga 240

atcgacctca ttgaaaaaga agacgcgttt ctggtaaaag ctgaggtaacc tggagtaccg 300

agagaaaaaca ttaaagttga cttgaaaggg gatatcttga gtgtgtctgg agaaaaaagct 360

gacgaaaaaaaaa agtcggatga agaacgagaa ggaacggtat tccatangat ggagagaagc 420

tacggaaaaat 430

<210> 4405

<211> 301

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-037-Q1-E1-C2

<400> 4405

gcgtccaccg gtatttaaca atttctaaa atatacagaa aatacttgcg gcttccgtg 60

ttctctgttg tcttctttac gcgtgggtgg acaacaacaa aatagttca accaattttt 120

agcatcctcc ccctctgaga gtgtggctcc ttctttggc cttcctcgcc ttatagctcc 180

gtccatctcg gaagatggca ttacacttta tttganatat gctttgggtg gagcaatctg 240

ttgttgcgtt actcactcct caactgttcc tattgacgtg ttgaagacac gtttacagac 300

a 301

<210> 4406

<211> 383
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-037-Q1-E1-D1

<400> 4406

gggtcgacgc cgcgtccac tcggacaacg cagagcttag gccaaagtttt cctgtgccaa 60
gcttggagaa tcctgctaag aaaaagttaa attcgtcagg aagctacctt gtgattggag 120
gttggggc aaccggcgct gtattgttg gtgggttgat aagtttcgc cgtgggaact 180
ctcgcaactc tcaaatagttt atgcgtgctc gtgttctgac acaagggtgca accttgggtt 240
cggttagcagg tactttctgg agtgcagcaa atatgaaaag gaaggagagg gaggcaggcag 300
aagcagccgg cgaagagttt ggagtagaaaa ccttggatca agacaaggcg aaggctctcc 360
tagaanagac cggtcgacag aaa 383

<210> 4407
<211> 403
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-D11

<400> 4407

attcacgggt cgacgcacgc gtccaaagtttt ctttggagaag tcattatgag ccttctgtac 60
agaatgccat cgattttgtt acctcgcagg gtagaatgaa atatgttcgt cctatattaca 120
aggatctta ctatatctat cctcgagggg atttggcgct gaagacattt tcagaaaacc 180
gccatcgta tcatagtatt gcagcaaagt tgattgcgag ggacttggag ttgatagaaa 240
attgattgct ttttatgtac aacaacaagc agggctctt gttatgtctt ggtttgggtt 300
tgtttagtg tctgaatatg caagtggatg cccgtaaaca actattgaca tatatatata 360
catatatata tgtatata gaaagataga tatcgatata cat 403

<210> 4408
<211> 401
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-D3

<400> 4408

gcgtccaaagc gtaactccgt ttcctggaaa gccttgggt ttacgttgct gtaatattca 60
acaaaagaaa tactggataa aacaaagata caataatata gtatgtttc aagtaatatg 120
tgcagctaattcgaaacagt ctttgtaccg aattcgccc ttgcaacgac aagtaagtaa 180
gaaagtgtct gtgtattctt ctcttgctc ctccaaccaa cacaataaca acaacaacaa 240
tcttcgattc tctctctagg aaatagttga gtttacaaat atttgcacc aatgtttca 300
tacacatcct ccatgaaagt tgttactgac acccatattc ttttggaaa catttcttgg 360
tctaatttttgc ttgatgaata gaaaagaatc gcaagatgac t 401

<210> 4409

<211> 330

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-D4

<400> 4409

gcgtccaaac aaaaggaagg aaacagggtgg aatcggtca ttactttct cgtttatgt 60
gtcgaccacc ctcatttggatattcgcaag tctgctgtaa agtgttagc agaaatacaa 120
atgcattttt gagaatggaa tcctacgaat ccttatttga gcaatacgca gcaaatgg 180
atagaaatgt atatccaaat atctcaacag caacattcgataatgcaaa caagtccgtc 240
gtacgggtgt ggtaagagat gccgttggta gagaacactt gttgtattcc attagtaaag 300
aaagatggtt attatttagaa tgaaacgaaag 330

<210> 4410

<211> 462

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-D7

<400> 4410

gtaacggtcc agaattccccggccgaccca cgcgtccacc cacgcgtccg cccacgcgtc 60
cgccccacgcgtccgttca gcactacgtaa gactccaaag gtgtttctta ttacgggttt 120
gaaggcctgggt ggaagtgggt agctgatgggt tgccacccgtc gtccttccaa agaggaagtc 180

gctaaaagga cacgccagtc tggcagttt gttcgaaagg accaaccaag ctcacaagac 240
ctttcagctt ggaggtctat gggagaaaact tattatcctg agcgaaagag tcaagaaaca 300
tttagacgctg aagaacttca acaaaggaag agcatgaata agtcgagttc ggaacgacca 360
aaagaaaaatg ttgcagctgc atcatagttg agtttggttc tatcataaac ttattattca 420
acgtggcgta ctttgttagt ttgttccact ttgtgtggtt tt 462

<210> 4411
<211> 375
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-D9

<400> 4411

gcgtccactt taaaacaaaaa gcagaagaac aacacaagag attttctaag gcattcgata 60
ttgaaagagt tcgtcgaata actacgatag gagaactcga tgactattat atatccaaag 120
tttttggtt tcattggaaag gaagattatt ataggaagaa tggaaatgaa ttcttcttac 180
cttttgcag agttcccttg cttattcttc agtgcgaagaa tgatcctatc gttgatacag 240
aacatgtacc acaaataacct aaatctctac ctattcattt attttataact gagaatggtg 300
gacactgcgg ctatttccaa ggattctttt ctccatctta tatggcgcaa gaaatgtccc 360
gttttttggg ttgga 375

<210> 4412
<211> 280
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-E10

<400> 4412

gcgtccaccc acacgtccgc ccacgcgtcc gagaattcga accagtactc atgaggggac 60
atataatttt gatagtaata ataattccta agtattttc ttgcgtattt gtttgcata 120
taaacaataa gaacaacgaa aaataaaaaa aataaaagaaa aaaaaaaaaa aaaaaaaaaa 180
aaaaagaaaaa gaaaaacggg cagccgctct aaaagatgca tgcttacgtg agcatgcaag 240
aaaagtcatc tgcccttatat actgtcaact aaattaaatt 280

<210> 4413
<211> 214
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-037-Q1-E1-E12

<400> 4413

cgcgtccata actgatgaaa atgcagtaaa ctagcagtag gacggaaaga ccccataatt 60
cttgactaga taggtttang gangagagag aatcatgaag tanaggaggt ggggtaagag 120
atgaaagaca ctgcatgagg ataagaatc taactgagta agaaaaataa gcttaagcta 180
atttggctgg ggaagtaaag cctaagaaag agta 214

<210> 4414
<211> 450
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-E6

<400> 4414

ttcccgcc gacccacgct tccatattga ttgaaccaac ttctggcaat accggaatag 60
cgttggcggtt tattgctgcc tctcggtt attctctcat cttgactatg cccgagtcca 120
tgtcgatcga acgtcgatg atacttttag cggttggagc ccaagttgta ctaactcctg 180
cttccaaagg tatgaaagga gcagtttga aagcagaaga actcttggaaa accacaccta 240
atgcatacat gttgcaacaa ttttccaatc cagccaatcc caagattcac tatgaaacca 300
cgggaccgga gattgttgca gctggagggtt gcgtatgtatt tgtttcagga gtggcacag 360
gaggtactat tactggtaca gggagatatt taaaggagaa gaatccatcg gtccatattg 420
tggcagtaga accgaccgaa tccccctgttt 450

<210> 4415
<211> 421
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-F1

<400> 4415

cggtaagaa ttaccgggtc gacgcacgctg tccacccacg acgtccgctt gttttggctt 60
tggtagtgat ctattatgct ttgcttggcc ttccattggc gtgttctgt cttattatgt 120
gctgtttacc attatttatac aggttacttc ttccattatgc ggagagcaca caacgttagac 180
gtggcagagc ggcaacttta gaacaaatca acagtcttcc atgttccagt tatgttcatg 240
gctccattga gagagaagaa gatacgagtt gtgtgatttg tcttacggac tatattgacg 300
gcgacatgat tcgtcactta ccttgcaagc atcattatca taagaaatgt atcgatgaat 360
ggcttagcatt ggacaagtct tgtcctctt gtaaaaagga tattgattgt cgtgaagata 420
t 421

<210> 4416
<211> 439
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-F12

<400> 4416

acgcacgcgt ccacccacga gtccgtgaaa taatgcagat atttgtaaag acacttacag 60
gcaagactat aactcttgaa gtggaggcctt cagatactat tgagaacgtc aagtccaaga 120
tacaagacaa ggaaggaatt cctccagacc agcaacgttt gatatttgc gaaaaagcaac 180
tagaagatgg tcgtactctt tcagactata atattcaaaa ggagtctacc cttcaacttgg 240
tattgcgtt gagggtgga atgcagatat ttgtgaagac acttacaggc aagactataa 300
ctcttgaagt ggagccttca gatactattg agaacgtcaa gtccaagata caagacaagg 360
aaggaattcc tccagaccag caacgttga tatttgctgg aaagcaacta gaagatggc 420
gtactcttc agactataa 439

<210> 4417
<211> 449
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-F3

<400> 4417

gggtcgacgc acgcgtccac tgttgcttgg gtactgatg gcgagatata tgaacttcat 60
gttcgttaatt atggaatggc atggggagct tttcttctct tgggtctgc agcatctca 120
acgacttctt tttccaagca agttcagcc ctaactttgc agggaaacttt ctatTTTtat 180
gtcggaggat cattgctgtt tctaataattc catttgatat tttacactga aactaaagga 240
atgttacttg aagatgttag agagctctt aacgatggca tgttgggatt ggcacggaga 300
aacttgagca atattcaaaa ttccattttg cataagttc ctactcttg gaagagaaat 360
gaatcatgaa ttatTTTta aaatatatgc ttgccctttg ttctagtgtct tttgttgacc 420
tttgcttgat aataaaacag agtgaatgc 449

<210> 4418

<211> 170

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-F6

<400> 4418

actgttctag aggtcaacgt aatcctatgt ttcttccaaa agagacatca actcctagcc 60
gaggatgatg aaggatgtcc ccaagttcg agaaggaagt agaaagaaga gagtgtaagg 120
cggcgtcata atagaaatcc gaaaggagta gaagaaaaga gagagaaaaaa 170

<210> 4419

<211> 374

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-F8

<400> 4419

ttcccgggcc gacccacacg tcaagctatt gtgtccctca ctacgagggtt tggtttctg 60
ttgtggtgaa gactttgtt agcaacttgt gtgcaaaaaa tggtcaactt gttgtataact 120
gatgagggac gaaacctgtt aaaggctac caactcattt tatatgtgc tatgttgct 180
ttctccgcca ctatTTTggg gcttatgggg aatcccattt ttaatctcta tctaattgcc 240
aatgaatata gacacccgga tcctagcgaa cctttgtac ccattgacaa agtgaagaac 300
gtcactttct acaagtctct ctccttctgt gcctgggtg tcacaggaga tcgtacgcgt 360

ggcatgcatt ccac

374

<210> 4420

<211> 297

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-F9

<400> 4420

gcacgcgtcc aactagatct actgccgtcg aaccgcctca tatggagcac ttgtgcaact 60
ttttgttcca gaatagagta atttccatgt ttactggat agagcgtatc tttgctccat 120
atgcagaact agaatatgtc ctcgttcgta ctgaatgggc aataacagta gtgttcgcfg 180
caatatcatt atggtgac aagtca gctt aatcattgcc atacaatgac gtgcttgaag 240
aagattctac gtggtcactt tgccatcata agttaattt agtagtaaat ttttcct 297

<210> 4421

<211> 433

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-037-Q1-E1-G11

<400> 4421

acgcgtccga aatttatcc aaatatccct ttgcgaaaaa catgtttcc gccaacccaa 60
caaaaattat tgcacaattt acaaaaagca tttggtaacc aacattaaag tataaaagtc 120
ctttgcacct gagtanagca gagatatgga gagttctta tccaaattgga agcagacgtt 180
cctttgcaga acaaaaaggca cagcagcagt ccaaagaagg tgaagaacca ataacgcctt 240
atcaacctgt gacggagaag ctggataaaa gagacccaaa ctatccttgg aagtggagaa 300
gttntcttcc tgaacatacc tacaaaccca aactcaatat caatctggaa aggcata 360
cacctttaga ttttagagat aaggtagccc cggyaattcct caagtttta agaattttt 420
cgatgcctt ttt 433

<210> 4422

<211> 364

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-G2

<400> 4422

gcgtccaatg agattcacct gtatgaatat tacaattcca ccttacaaca gtcacagat 60
catcaagatt tggcgagtat tcataagcat tttgggcttt ttgttgcttt tatcctttc 120
ttccatgttt tactggatgc gaaaaaatgc tcctcgaacg gacttataga tgcttacg 180
tggagcttgc cgccgtgtaa tgacttgaa taataaaagtt gggttgcttc catttaaaa 240
aaaaaaaaaaag aaacaataaa aattaactaa tacatccttg tcagtaatca tgaatacaac 300
aaataaaaatt gcgagaaata caaagaagtc ttaaaaagaaa ataaaaaaaaaa aaaggggggc 360
cccc 364

<210> 4423

<211> 435

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-037-Q1-E1-G3

<400> 4423

gcgtccgccc acacgtccgc ccacgcgtcc ggattttcc gtcgtgaggg acgagttatga 60
gtttcaagt caagcgtttgcgacgcgag tcaaaaaccc gacatgtctg tttctcttg 120
tgctccatttgcgttgcgacttgaa gacttgaa gca gccat cccaaacaaag ctcttgaagg 180
acctttcaag agcctccagc ccgacttcta tcccgagtct gagaaaaagc gcttgcgttttgc 240
ttataatgag caataactcct catcttacc tgagaacctg catagttgga gtttgagggc 300
acgttgcgttgcgatgata gttgcgttgcgatag agagattgag agaggtttaa agtggacgg 360
gaaatctact tgccttggaa ctttgcaaga ggcgtaaag gctctannaa gaagaaacta 420
caggttgaat atgca 435

<210> 4424

<211> 141

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-G5

<400> 4424

gtaaaggccc agaattcccg ggccgaccca cgcgtccaga aactccaaa gataagttgg 60
atacgagtca agtgactcca gaagggaaat atcacaacca cgacagtcct tgagaaataa 120
atcgacactc gtgtgagatt t 141

<210> 4425

<211> 428

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-G8

<400> 4425

ccgggcccac ccacgcgtca gtaggattag aacaagtggta tacgctatcg aatagttac 60
gtaattccgc ggttatttcc aaggatgaat ttcatggagt acctgccacg tttccaagg 120
aagatatgag tacttaggt ggaaatagtt gttactcat ggagacgaat aacaacagt 180
caaagtggct gacgagtagc aagatgtgt catcggaaatc ggattgccta acaactagta 240
cgacgacaac tcgtggagaa agtcctgtga agaagacatc gaataattat acgacttgg 300
cgagttatga aattcctggta gttcgtttg gagatgactt gggccccac tgggtattat 360
ctctttctaa ttcttccttg acagccaaatc ctccggatgc tgcaggaaac aactctttat 420
ataatcac 428

<210> 4426

<211> 288

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-H1

<400> 4426

gggtcgacgc acgcgtccgc ccacgcgtcc ggctggtcgt tttccacccg atgaaaactag 60
aaacattatg gaaatggcgt atcaacgaat atttggaaac tattacatat tcgaagctga 120
gaaagaagaa ttgaagacca ttgactctgc ttccagaat ggaagatacc gcgtcaagga 180
ctatgttcga gctctgagca agtccgatgt gttcaagaac aagttttct ataatcgccc 240
aatccaaaac tccaaaccaag ttgtgtttcc gtaagaaaat gggaaaagg 288

<210> 4427
<211> 364
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-H11

<400> 4427

acgcgtccag cattattatt tacgtggcag tgattgcact aactacttg actaccgtt 60
gttcggggat ggcttatata tatcacgtat tttggaacaa acaaggaaat gtatttcaac 120
atgtcacaat gataagacga caacgcaatc gaccgaaatg tttctaaatc ctcaacacaa 180
gtgtttccaa acaggaaatt cgccttctga taagcttacc ttagtgcgc gtatgcctaa 240
tcatcataaa accttgatac tggtacgcaa cctatataat aaaatataatc atcataatcg 300
agtaaaaagta ctgttgcgag agacgtgtcc ggacaaaaaaaa tatagaaaaaa cgaattttt 360
gaaa 364

<210> 4428
<211> 407
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-037-Q1-E1-H3

<400> 4428

cggtaaagaa ttaccgggtc gacgcacgacg tccactcacc aaaaaagatg tgaaacattt 60
tttcgatgtg atatggtttgcatatttga tatccaatat tcttggttt gttctttgaa 120
tgccttgaac cagatgtgtc gaacctacag cgtgtctgtc ccggctggcg atgactttga 180
atttccaaac ttccttgct taagtgactg ggatctcggtt cattttgtt cccatagcaa 240
cgaacctgtt tttcgatgtt ttcacaatgtt catcatgtgc tgcttttag aacaaagaat 300
agttgtcttt cggatggcc tttgtataact gaaaaattcc aacagctgggt tggtgttgg 360
tgctttgcgt gatatcacan aacatgaaaa ggacanagaa aaccgtt 407

<210> 4429
<211> 423
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-H4

<400> 4429

ccgggtctga cccacgcgtc cacgtatacg tgctgtttc aatgcagctt tgacatttg 60
agattgaaat ctccctagcat gaagggttcta agaccaacga aggacagtgt cctatggaag 120
aagcttagcaa taataatact gatitagac aaactatccc ttcaacggga aaggacacag 180
ttggggcaaa cagcgatcat attcggtac atgaagactc caactatccc tattggaaag 240
gttactggta cgatattttt ctatcccagt ggtatcttg gattggagaa agtcctcctc 300
ctgtcgaaca cgcaatgcag cagtacaaag aatattcaca agtccaactc caggataagt 360
agattagaaa atggctttt gtttctcaa tgcagccagc actcttgta ggtccgttt 420
ttc 423

<210> 4430

<211> 433

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-037-Q1-E1-H5

<400> 4430

ttccgggtcg acccacgacg tccaccacg cgtccgcccc cgctccgaa cgacagttgt 60
cttgtcctac ttgttagagct cccgtagatc tctcaagtga taatccaagt ggaacaagt 120
ttggtgcaaa tgggttttggaa gagcaaggac aagtgcacaaa cccagtagaa aggagacaga 180
tggaaaatgg aattgccaat cctccaagag gacgtacatt aagagtttgt ttgcgtgtca 240
atattggaaa caggactgca gagtggaatc cttccaaga ggacctgttt cagacattgc 300
acgaaggcaag tcattctact ttgatgcatt tcagtcctg tcctcgtcct cctcctttcg 360
agnatttagt atgaaatgaa caacagtcgg gttggAACAG cgtccttagt aataacagta 420
ataataatac gat 433

<210> 4431

<211> 422

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-H9
<400> 4431

tgacggtcta gaattaccgg gtcgacgcac gcgtccaggg gcagaacagt ttgggcagt 60
attgccagcg ccagtagaaag aaacaaaagt gtccaaactc tttggactct gctttgctt 120
ctatctagaa tggcagtgga aatgaaatcg ggagtggcaa gttacccttt ttctgtcgg 180
agagagtgac aagggttcgc cacccagaca gcatgtttg gcacttggcg ccacaaaacg 240
aaactgacta gggcaaaaca ctgaatgtga tttgataaag agtaagcgtg cgtgacactg 300
gcagagtgcc aaccgcaggt tcgtctgtta catagccagc tgctgtgtcc ttatctttg 360
cgagattagc tccggtagga cgacgctaca aagccaactt gcaatcctcg agacgctttg 420
tc 422

<210> 4432
<211> 352
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-A11
<400> 4432

tgtccgtgtc tcggagacat ttaagaagag atcaatcaaa gttatccccca atacaagatg 60
aggtacaaac aatggcggtc ctaacggtaa ggatccaaag gtagcgaagt aaatagacgt 120
ttgaaaggcg tccagttatga aaggagaaac gagtttagca ctgtcttagtc gtccaaactca 180
gcgaaaacagc aataactgtg aaaatgcagt aaacttagcag taggacggaa agaccccata 240
attcttgact agatagggtt agggaggaga gagaatcatg aagtagagga agtggggtaa 300
gagatgaaag accactgcat gaggataagg aatctaactg agtaaggaaa at 352

<210> 4433
<211> 422
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-A12
<400> 4433

cgtccgagat tggacaaaac aagggtggta gtgggtggta gaaaaaagcc gttacaaga 60

| | |
|--|-----|
| cacacacgag tttctcggtgg tatgggtgaa aagtatttag agcaagtgtg gatattcata | 120 |
| cgacaataaa tcaaccttgt gtccggtgag aaactgtgct acgggatgaa caatagtgtg | 180 |
| gttgcgggac agagtcacga gtcgagtggg tacttgaacc aagtattaca agcactcgat | 240 |
| gaagcaaaga agcaagcaat agaacaatta caacaacgag cagaagaaaat tagagaatgg | 300 |
| tctacggta caaccaagaa tacgggtggat gcgttgtgg aagagtccaa gtatatacg | 360 |
| tctttgc当地 ggcagaggag caagaagaat aactactacg aaaagattac gctgggtttg | 420 |
| at | 422 |

<210> 4434
<211> 342
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-A2

<400> 4434

ggtctagaat tcacgggtcg acgcacgcgt ccgaattgac taaaaaattt ttgcgcgtt 60
gtatccatcg ttgtgctttt agcttcgcga ctcgtcgatt cttttgtgtg tgattgggtt 120
atccgaatcg cctttgtaaa cgcttggta tcagagagaa gtaggaatgt tggaccggaa 180
gactcatgaa agatctgtttt aattatcatg attagctgag catgcagagc gttatgtga 240
catgatacaa caaattacaa agaatgcac agacgccaac gataaagttag cgaaacttac 300
tgtaaatgaa cggaatcatc attcactggc atatatgaat gt 342

<210> 4435
<211> 322
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-A4

<400> 4435

acgcgtccgc agtaaaaagaa gaaagagaaaa ggaaaaaaact gagtatcagg aagaaaagag 60
ggagtagatg aggaaaagaaaa gatcaaggaa gtaagagtaa gagaaggagt aatgtgaatg 120
aaagcagggaa agtatttgaa gaagagagtg taaagcgcgt acctttgca taatgtcccc 180
gcgagtgaaa gaggaagcaa aaagaaaagaa aaagaagtag ccaggttaaga cccgaagcta 240

gttgatctta tgctgtccaa gcgaagtaag gtcgaaccag tatctgtgga aaaagattt 300
gaagagatgg cataagggtt ga 322

<210> 4436
<211> 450
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-A5

<400> 4436

ggccgcaccc acgcgtccac gtgtgggtgt gctcagtcag aactgcttct cagttgtta 60
cgcaatatgc cttagtcataa ggaacaaaaat aaaggaatta aaatatcagc tgacggttac 120
gcactaaagt tgagcggtat tcgggtggac gtagacggca gtttggtcac tatgggtggac 180
gcagacgacc tcagagccct catgtttaag gaaagcctca aggaaaaagtc aaagctgcat 240
gaccaaaaat ttttcaaaag ctattatgag gagaataagg actactttta ttatatgact 300
catacgaga agaaaaatgtt tctttctctg gaagttgcac gagaataacgc tactctggtg 360
ggaaactcgt ttctgcagaa atattggac aaagtcatgg acgcacgaaca cgccataactaa 420
gggaaaacaac gttgttgctg atagtttgcg 450

<210> 4437
<211> 239
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-A7

<400> 4437

gtccgggtcg acccacacgt ccagggaaagg tcatggaaag aagttggtaa acaaattgagg 60
acacgtataa cagaacacaa gaaaggaaaa cgtattctaa atcaaaaatt gaaagctttg 120
ttcgggtgagt cgttgtatTT tccaaccttt ttccaaggat tgctgcaggt gaaaaatgtat 180
attttaaggc gttctcttc cgaggagcca taatataacct tctaaaggtt ttatagttg 239

<210> 4438
<211> 322
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-B1

<400> 4438

gcgtccgaat ggaaggacac ccaaattttc gaagtggta tagaaaaac cagtgccgac 60
atcaacgctg gaatctgtgt agcaggcatc caccatggga cctggatgta gtcgatccag 120
tataaatctg catgtgggg aaggattggc actgatacää ggaagtatgg gacaatattc 180
aggaatggcg taaacaaggc aagaataaaa aggaaggaat acacggttgt tgtggcaaga 240
acacatacga actgcaacgg tttaagatct cgtgtaatcg atgcactaaa aaactgagtg 300
attaagtcga ataggagtca tt 322

<210> 4439

<211> 427

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-038-Q1-E1-B3

<400> 4439

gggtcgagca cgcgccggc attatggaaat gaaacatttc aaatgatttt gctgtgggtgg 60
aaaaccagaa acgagtagtt tctacatccg ttgtgttgc tcttgtgtcc actggaaatg 120
gagatgattt caaatccttt ggaatacaac gacaaaggag atatctaaac tgtanggggg 180
ttttctacag aaacagaggg taactcgagt gtcttcattt atagaaaaga ttcccagaat 240
gtcgacggcg ttttagagaca gaatgagaaa gctatccgca acaacccgtt atacaggaag 300
ctccctatga tatccgtgag gaggccatgg cagacttgaa aatactcgtc gaatattcaa 360
aatgaaaaaaaaa gaatcgaaaaa actctacgga aagcattttt attcgaaatgaa gacatgaaga 420
acaaaag 427

<210> 4440

<211> 462

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-B7

<400> 4440

gtataaggctt agaattcccg ggtcgaccca cgacgtccac ccacgcgtcc gaaccaatga 60

acgaagtgtg gataatagaa ctagatggtt caagtcaaaa tctaaaaacg ctcgttctac 120
ttggaacggg aaggtaacaac ttccaaaacc atggaaagcg gaaccacctt ttgggccgtt 180
gacagaaaaca gagttgaaaaa gaatgagaga agaattctgg gatacgagag tggaaaggaag 240
gcaagaaaatg tggcaagcgt tgaaagcagc agcagaaacc aacgacgaaa cgttgcgaaa 300
tgaaattgt aaggcagctg gattgactcc tgccaatgaa cgaagaacgt tggaaatctt 360
ttacgatgaa ctaggcaact actatgaggt accggtgtat tggttgggg accccgataa 420
cttggttcga ttggaagaag aggaagacaa caagaacaag tc 462

<210> 4441
<211> 458
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-038-Q1-E1-B8

<400> 4441

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tttcgtgg tcgatgggtg gattgtcaa tatttttga caatgaaaaa aatattgtac 120
atctactgaa atgtaagaac atgaggaaga aagaggcaa tacggaaag cagtaaaaga 180
agaaagagaa aggaaaaaac tgagtatcag gaagaaaaga gggagtagat gaggaaagaa 240
agatcaagga agtaagagta agagaaggag taatgtaat gaaagcagga aagtatttga 300
agaagagagt gtaaagcgcg tacctttgc ataatgtcnc agcgagtgaa agaggaagca 360
aaaaganaga aaaagaagta gccaggtaaa gaccgaagct agttgatctt atgctgtcca 420
agcgaagtaa ggctgnaaca gtatctgtgg aaaaagat 458

<210> 4442
<211> 359
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-C1

<400> 4442

ggtccagaat taccgggtcg acgcacgcgt ccgattatac gtcatcgcat ccatctggct 60

atgttgccag ttgaagttaa gcctaaggat gttctttac gttctcaaag gcatcttaa 120
tttataataa catatacatg cgtggacaat tcttcgcga tttcacacac ggaatcttct 180
catctatcat gataaggtga cggtaactc actcctccga tatcaccaca cgatgcaaga 240
taatactttg gttctaacaa gttaatgtcc agttagataa catatcaagc atgtccattg 300
acacctcgat ctcaagttcaa agatcctaag ttacagttgg gtcctatagg ttcttctgt 359

<210> 4443
<211> 445
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-038-Q1-E1-C2

<400> 4443

gggtcgacgc acgcgtccga tggccacttg ggcgcattcgt tggttccgct ctccaaccaa 60
agtcacccctg tcgttgtggc ttgaaatatt ccacttgtaa gaaaccttat cgtatagata 120
ttttacgaat atccaaacct agttgtttga ataaaactaga ctttcgagct tctcagcaaa 180
aaaaggactc aaagaactcc aagttattgg ctttcgaaac gaatggagat gttctcaagt 240
ttggagtcctt gtttacttagt agttgcctt tttgttattg gttccttatta caagtatttc 300
gagtatctga acaaacagct ggactggta ctactggatt gttaactatc tttggaatgg 360
gactttggac tttccgtat tttctcgctg tgctaatana gagatgacat atgtgcaaca 420
gttgagagag tatgaagaca aagtt 445

<210> 4444
<211> 431
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-C4

<400> 4444

ggtcgacgca cgcgtccgac gtcatattat gatgcctaat agagttgaag ttgtcggtgg 60
tgcaattttt atcgaaagta ctgaagtggc caaggcagag cctggagata atgttcgact 120
tcgaatcaag ggaatggaaag aagaagatat tcggatggga tttgtattgt gtgacaccga 180
tgctttggtt caaggcacta cgttatttga tgcacaaatt atgctttgg actataaaaa 240

tattatttgt gctggataca gttgtgtcat gcatgtacat gcagcagtcg aggaatgcac 300
gattgaaaag ttgctggcac aagttgatcg gaaaacgaac caagtgatac aaaagccgac 360
aaaattctta aaaccaggaa tggcagcgat cgctcgata tctgtagcgc agccaatttg 420
tatcttacct t 431

<210> 4445
<211> 452
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-C5

<400> 4445

ccgggtcgac ccacgacgac caatttgaa tcgatcttgt ccaagtgaga atggcggcaa 60
agaatgaaaa ctcttggtgt atgctttgc aagtgaagag actaagcaag gacgctgttg 120
tacctaag agttcgaaa cttgctgcag gttatgacat ttgttcctcg gaagactgta 180
ttgtaccagc tcgaagtcgg tactgtgtta aaactgactt ggcagtggcg attccctcg 240
gacactatgg aagaatagca cccagatcag gacttgccctt aaagcatgga atcgacgtag 300
gagctggtgt tataatgtag gactatcgag gaagcctcg tattattta tttaatcatt 360
cccgaagaag gatttcatat atccaaagga aatcgaatag ctcaacttat cctagagaga 420
atatctactc ccgaagttgt tgaagtggat aa 452

<210> 4446
<211> 464
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-038-Q1-E1-C6

<400> 4446

caggtatagg tctagaagtc ccgggtcgac ccacgacgac cacccacgac tccggagata 60
tttttatttgt gttgcaaacc acatcatgtc acaacaaccg tcttctgcac ttcgagtcgt 120
tgtattcagt accaaagact atgatcaaag tggattgaca gaagcacttg aacgtgtcc 180
taatgctgct cctataaagt ttcggttctt atcgccagg ttgtctgcaa atacagctga 240

gcttgcacaa gatgcagacg ctgttgtgt tttgtcaat gatactgtga acaaggaagt 300
attgaagata cttcacgaca gaggagttgg ttgtatagct ttgcgttgtg caggcttcaa 360
taatgtcgat ttaaaggcag cttccgagtt gaaaattcct gtggttcgna gtactgccta 420
ttctcctaata gcagttggag agtttgtgc tgcacagttt ctta 464

<210> 4447
<211> 434
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-C7

<400> 4447

attcccgccc cgaccacga cgtccagttt ctcgaagaac gaagaaattt aggcaatgga 60
aaatggctgg attggctac tgccgaagcc ttagctttt cttcttgct ggatgaaggt 120
tatcgcggttc gtttaagtgg tcaagatagt gagcgcggta cttttctca acgtcatgcc 180
gtctgggtcg atcaagaaaa ggagactcgt tattatcctt tccaagttat tcatggcaaa 240
gatccaagtg tctacaattt gcacttgtca gaaaatgcgg tgtaggttt cgaatggggt 300
tattccttgg aaacacctca gactttggtg atatggaaag ctcaatttgg agactttgca 360
aatgctgcac aagtttatgtat cgattgtttt ctatctgtat gcaaaggaa atggagaaaa 420
caaagtggtt tggt 434

<210> 4448
<211> 258
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-D1

<400> 4448

ggtctagaat taccgggtcg acgcacgcgt ccgaccacac gtccgttgtt gtgaagagtg 60
aatggaaata agctgactac caagtagaat agagggacta catgaggagg tgcagatcaa 120
ggaagtaaga gtaagagaag gagtaatgtt aatgaaagca ggaaagtatt tgaagaagag 180
agtgtaaagc gcgtacctt tgcataatgt cccagcgagt gaaagaggaa gcaaaacaca 240
aaacaaaaaa acactatc 258

<210> 4449
<211> 453
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-038-Q1-E1-D3

<400> 4449

gggtcgacgc acgcgtccga catcgaggca tccatTTca catttgcgtt tgTTgaagag 60
cagcatgatg aagagcgcta tgaagttctt tgtatTTAGC attatTTGG caaatgttGT 120
tcttactatt caagcagcaa cggtttGGA gactttggag tcactgaaat atacagagta 180
tcttgacatg gtaaaggctg caggcctGGA ctgcgaagtTC aacgactCTG ctgttacatg 240
gactgtttt gcagcaaaca atactggagt caatGCCACC ttggcaccaa agcacttggT 300
tatttctaat atcacatcta atgcgacgga gagcaaAGAC attgtggaat atactttgtA 360
caaccataCTTtGTCAG atgatattaa gacaggaACA actatCCTTA acGCCGTANA 420
cggaatgaat ttgactgtgg ttaagaatac gac 453

<210> 4450
<211> 342
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-D6

<400> 4450

ccgggtcgac ccacgacgTC cgaacgcgcG tccgcaagaa agtaagtgtA gaacacattG 60
catTTGCCGT atgtttGcc gagtgtcaca ggaagtgaaa gaggaggcaA agagatAGCC 120
aggtaagtcc cgaggTTAGA tgctcttcta ctgtctatta tactgtccgc tcgacctata 180
gctgtggcag tagctgtggA aaaggatgtg gaaggGGTgg catGCCGGC gaaacGCCAG 240
acagctggaa tgctacctgg gccacctcga tagcgTTAGC agtagcgtat gcaggAAagg 300
agaaggtaga agaagcaaAG gaggactcAG agcgggactg tg 342

<210> 4451
<211> 278
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-038-Q1-E1-E11

<400> 4451

tccgagcaag tacagggcgg cccgagaata gagaaggcgt aagacgtat acagagtang 60
aagaaaaagag aagagaccta gaaaagaggt aaaagaagag taaaacgact acaaaacgta 120
cggaattcac gaggaaggag cgtgaacgaa ngaggaatcc caagtaatcg atgaagaaaa 180
agttcggtg aaagcgtgaa cgattttgt acacactgcc cgtcaagtcc tggaaagtgt 240
ctangaataa gcaggagaag tagaagagag tangaaaa 278

<210> 4452
<211> 446
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-E2

<400> 4452

gggtcgacgc acgcgtccaa ctttatggac ttggatttg cacgtgtgg tggctcagt 60
cagaactgct tcctagttt tagttaacgcaata tgccctagtca taaggaacaa aataaaggaa 120
ttaaaatatc agctgacggt tacgcactaa agttgagcgg tattcggtt gacgttagacg 180
gcagtttgtt cactatggtg gacgcagacg acctcagagc cctcatgttt aaggaaagcc 240
tcaaggaaaa gtcaaagctg catgacccaa aatttttcaa aagctattat gaggagaata 300
aggactactt ttattatatg actcatacgg agaagaaaaat gtttccttct ctggaaagt 360
cacgagaata cgctactctg gtggaaact cgtttctgca gaaatattt gacaaagtca 420
ttgagcacga acacgcatac taagga 446

<210> 4453
<211> 344
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-E4

<400> 4453

ggtctagaat taccgggtcg acgcacgcgt ccgaccacga cgtccgacga aaggttacct 60

atggcattgc tattcctaca attcttggc ttgggttat taatggcat gttgctgcaa 120
agtttatctt tactcgaatt ttccgtggtt ctggcactt gcatgagcat actgttattg 180
ggtgggtac ttggatttgt ctgttgctc ttgcctggat tattgcatgg ataatatcag 240
aagtcatcgg ggtatataat gaccttcctg gtttagtagc ttcattatgg gcgtcacaat 300
ttacttacgg cttgtctggt tactttggt tatttgataa ttat 344

<210> 4454
<211> 286
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-E5

<400> 4454

ccgggtcgac ccacgagtcc aattggcga ttgtgtgaag ttgtgtatggaa aacaactgcg 60
tctagcaagt cgaaacaaac tggtcaccag tggtcaccatg gtgtgtatgc ggaaggaaaa 120
ccgaaaaaga agatgtgttg tgcgtgtccc gaaacaaaga aacagcgtga tgagtgtatt 180
ttgcaacatg gagaagataa gtgtaaagaa ttcattgaag cgcacaaggc ctgtctgcgt 240
caagaaggct tcaaagtgtta aagaaaggaa ataaagcttt tggaat 286

<210> 4455
<211> 250
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-F1

<400> 4455

ggtcgacgca cgcgtccgag catacgtccg gtgcagtata gtgtgtgcgg ccatccaaat 60
attacacatg caatcgagta aagtgaacgc gagtataaga tggtgtataaa aaattggcgg 120
tcctaacagt acagatccat gtgtaacgaa gttaatatac gtttgatagg cgtcctgtat 180
gcagggatat gacagtatga cactgtcaat gtcgtctaac acaacgtcac agcaatagat 240
gttacaatgc 250

<210> 4456
<211> 339
<212> DNA

<213> Cyanidium caldarium
<223> Clone ID: LIB190-038-Q1-E1-F2
<400> 4456

ggtctagaat tcacgggtcg acgcacgcgt ccgcggacga cgtggcggga cgcgtggcg 60
gacgcgtggg cggacgcgtg gttgttggg cttgtgggt gtgatccct ggattgagct 120
acgttagtggc aactccgctg tcttgaaga cataactgca agtattgaaa agcctgacat 180
aaaatggata actaggacga atctcagtac ttgtctgaat tctgcagaag gaaatgttac 240
ggttgacttg tcgcggcagt gtagcttcaa agatataattt tcattgaagc ttctcgacaa 300
taactttaag ttggcgtgtt ttaatgatgc ctgttttt 339

<210> 4457
<211> 451
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-038-Q1-E1-F4
<400> 4457

gtgacggtct agaattcacg gtcgacgca cgcgtccgac cacgagtccg ggaacgaaag 60
agctcttgg gccagttaa tcaaatcgc agcagtcagc ctgttggcag tcattcacta 120
agattccttt cgcgtcgac agtttgatt tcgacaagta tgcatataca gtttcagaa 180
ctacgtgtat aagcctaaca tccggatggt gtgttccact cattctgatg tatcttata 240
gcaacgcttc ggaggacaac aagcaggaat ttgtccaaac ttgctgtttt acacacgact 300
gaactcgaag gacggtggcg ctttctcagt tcattaaaga tttcctcaact taatctttc 360
aattcaaaat acaatgctat attgctcaa ctacgcgtca tagattgaa tcgttcgaaa 420
agtaaattca gccgttcagt ggacaacgac g 451

<210> 4458
<211> 454
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-038-Q1-E1-G2
<400> 4458

atttacgggt cgacgcacgc gtccgtatga cacaaggcac gcaggttat acggtgagc 60
aggttgcaaa gcaccacaca cgtagtact tgtggattat catacacggc aaagtata 120
atttgtcttc gtttttagat attcatcctg gtggcgacca gatacttta caatatgcag 180
gtgacgacgg taccctggaa tttgacaagg cagggcaccc agaagaagcc cagttattat 240
tgcaagatta ctgtatttgt tccgtaacga gagattgtgt tttagaatgt gatggtttag 300
taaaactgac tccccaaaca agtgtctgga gaaaagtctg gcgtatggatg gacacctcg 360
cattggatag ctttcattgg ctgtttagt tcgttggaaat tgtttctgtc ctgtttagt 420
ttgctcattt ttgaaatgga tagttgtgt acat 454

<210> 4459

<211> 433

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-038-Q1-E1-G4

<400> 4459

attcacgggt cgacgcacgc gtccgaaaag aaaatggatt cggtagtgaa actatccacc 60
aagcaactgg acctcttgtt ggagtcagga aagcctgctt ctactagttt gacagttgaa 120
aatatttcta aaacctgtat atgtttaaa gtaaaaacta cacagccaca aagatactca 180
gtacgtccaa gtgtangggt tatcaaacca ggcgaaaaga aggacattct aataactctt 240
gaacctctca aagagatacc ggaagatcta aagtcaaaca aagacaggtt cctactacaa 300
gttgcaagaa tatcgacaga tgcagccaca acagacgttc acgagttgtg gaaaagagta 360
aaggaagact ccgtgctgca gcagaaattt cgagttcagt ttgtattagg tggacaaaac 420
gcagatattt gct 433

<210> 4460

<211> 388

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-038-Q1-E1-G5

<400> 4460

aattccggg tcgaccacg acgtccatct cttgcgagg aatttcttc ggggccgaag 60
actcgcttc ttgtttgtg gtgggtcg ctgtttgtct ctcaagttt tgccgaaaat 120
ggttcaacag tggagagcag caggtctcac ttatcttcgt tatgcaaata tatgtgcaga 180
ttttgttcgc aaggcactaa aggaaccgaa aagaactgaa gcattgtcga ggaccgggtt 240
tgagatgacg agaagcgagt ggagtgaagg caaggttgc aagagagaga cccttacaca 300
agagaatgaa actagtaacg tcgccaagag taacaagtga atgtgttgc tgtaatanac 360
gtctagaaga aggcgtacgt gtcanaaa 388

<210> 4461
<211> 208
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-G7

<400> 4461

cgggcccggacc cacgagtcca agtaaaagaa gaaagagaaaa ggaaaaaaact gagtatcagg 60
aagaaaaagag ggagtagatg aggaaagaaaa gatcaaggaa gtaagagtaa gagaaggagt 120
aatgtgaatg aaagcaggaa agtatttgcgaa gaagagagtg taaagcgcgt acctttgcg 180
taatgtccca gcgagtgaaa gaggaagc 208

<210> 4462
<211> 441
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-H1

<400> 4462

attaccgggt cgacgcacgc gtccgaccac acagtccggc ttacccacca atcttctcag 60
ctctcatatg gatgtggtcc ctgttagagac tcgaagttgg acaatggatg catttgcgtt 120
gatagtggaa aacggtacaa tgtatggaa acgtactcag gatatgacga gtgttaccat 180
tcaatattttt caagcacttg gaaacctattt acagcgtgga tggaaaggccag atcgaactat 240
tttggtttcc gtagtgccccg atgaagagat tggagggacg caaggaatgg gagtgttgt 300
agaatcgaa gaattccaga aatgaaat tggtttgcgaa ttggatgaag gattggccaa 360

tcctgactct tttatgtgggt tgtattatgg tgagcgacag ccttggtggt tagttattgg 420
agctatcgat cagcctgcac a 441

<210> 4463
<211> 413
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-H11

<400> 4463

cccacccgtc cgagtatata ttgatgacaa acaggaagag tttctcagcg cttaggatt 60
ggtgtgtgta taaaagcgac aaaggtctgg ctttgaagta atttccgtc tccagaactg 120
caacagccta tttgcactag agtgtagtat ttgttagaaa gtccataaaa agttgacctg 180
ctaattgccat tgggttatg ggaagagtcg cgtcattttg tattgtcggt cacaacaagg 240
ttcatctttt gatgtttttt cggttcttaa gagttagtgc agtgttgaga agtagcagta 300
cttttgggtgta gagagccaat ttcttgcattt cttgttttaga gacatcctct cttgtcaact 360
catgtgtctt tcgattctgt ggagttgctc tacgaaagaa gaaacttttt ttt 413

<210> 4464
<211> 415
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-H12

<400> 4464

acccacccgt caaacgtcca atatgatgca cgcaaagaag tgacgcagta catcagagag 60
tgaacacatg caagtatgta aatccagtca gatagtaaag cggctacgtt caatagaagg 120
cgttattttat tttgacaaaa atcaatcaga agtggatggt ttgagtgttc atagtttga 180
taccgagttct tctggtagag ctgtgacaca cgagctggag cgtactggaa agagtgagca 240
gagcaaaata gtaacgcata cctctgaaaa cagcagaaga aaaacaaaga gaccttggac 300
cgcagaagaa gacgagaaat tggaggagtt ggtgaaacag tacggttagca gcagacagt 360
gagtttgatt gcttccaaac taggtcaaag aagtggaaaa cagtgcagag aacga 415

<210> 4465

<211> 358
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-H2

<400> 4465

cgggtcgacg cacgcgtccg accacgagtc cgggcggcaa ggagcaagaa gaacgtcaaa 60
aggcaataga agatttccgc agtggcagaa aggacgtcct agttgctacg gatattgctg 120
cgaaggggtt agatttcct caagttcagc atgtcatcaa ctacgatatg ccaaaggaca 180
ttgaagacta tgttcatcgc attggacgaa ctggaaggcg tggaaacgg ggtcttgca 240
ctactttgt caactccacc tgtaatatga gtgtattatt agattgaaa gaacttctca 300
tcgaagccaa acagaaaagt gcacccttt tagaaaaattt ggatgtgcac aactttgc 358

<210> 4466
<211> 450
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-H3

<400> 4466

gggtcgacgc acgcgtccga ccacacgtcc gatcaactgc acaaaagatg atgatatcca 60
agtgcataatgt aaaaggaaag cccgtgatta cgctactca aatgttggag tcgatgatta 120
agaatcctcg tcctacgaga gcggagacga cgatgttgc caatgccgtt tttgatggca 180
gtgatttgtt gatgcttca ggagagactg ccaaagggtga ttatccgtt gagactgtac 240
agacgatggc tggcaattgt cgtgaagcgg agagttgtat tgattacaat tataattttt 300
catgttgcg caatttgcgtt agacaacaaa agccttctat caccgaagtg attacttctt 360
ctgctgttcg aactgctttt gacttgcgtt cctcgctcat tctttgttta acggagacag 420
ggacgactgg tcgtttggta tgcaaataatc 450

<210> 4467
<211> 419
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-H4

<400> 4467

gcgtccgacc taatccattg tcttcattggc tagtggctcc aagagcacca agtccaacga 60
aaaagtccaa atcacaaaaag aacaagagga agagttcgc gaagctttta cgttattcga 120
caaagacggg gatggtaata taacagtaaa ggaactcggt acgggtggtcc gttccttggg 180
tcagagtcct acggaagcag agttgaaaga aatgatagca gaagttgaca aggatggaaa 240
cggcaccatc gactttcaag agtttctcga cttgatgtcc aggcatatga gacaaggcaga 300
tacagaagaa gagatacgtg aagcgtaaa agtttcgat aaggatggaa acggttatat 360
ttctgcccga gagctgcgtc atgttatgac cagtttaagc gagaaactta cagatgaag 419

<210> 4468

<211> 428

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-038-Q1-E1-H7

<400> 4468

cgggtcgacc cacacgtcca gagagtttc gtgcaagtta tggctgcgtt ttgcgttgtt 60
tgcatacttg tctcaagaag caacagttcc aaagagtgtat tgtagcgtg gaattctgtta 120
aggaaccgtt agttggacaa aaaagtgc当地 cacaggcacc tacggtccaa caaaggcacc 180
attcacaag ctcaagtttgc当地 aatggattta gcaacgagcc aatggatatg aatgagtggaa 240
aacgtaaata tagtaatacg gacacaagaa cggaaagcact tccttggttc cgggagcact 300
ttaatccatc ccaacttcct ttgtggattt gcaagtacaa gtataacaac aagttggaaa 360
aaacttcatg tcngcgaatt tggtatctgg atggttcaa agattggagc cttaagaaa 420
gtatgctt 428

<210> 4469

<211> 415

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-A10

<400> 4469

ccccggccga cccacgacag tccatgctcg tccttggcca ggtatTTAA gaacgttattt 60

gaatgatcat cgaagatttg aagaaaccta tttcatcca ttcctgggtt attactatac 120
tggagatgg tggtaaggg atgaagatgg ttgttattgg ttgagtggaa gaatagatga 180
tgtgattgga gtaagtggc gtcgaattgg aacgaccgaa gtagaatctg ctcttatttc 240
tcaccctcat gtggctgaag ctgctgtgt tcctgtgccg catgaactga aaggacaagc 300
tgtttatgct ttgtcactc ttcgagcaaa tatccaacct agtaaaact tgcacttgga 360
gttgcgacaa gtagtaagag aaaagattgg cgctcatgct gttccagaaa tgatt 415.

<210> 4470
<211> 428
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-A12

<400> 4470

ggtaactagtc cagaattccc gggccgaccc acgcgtccac ccacgcgtcc ggagcttccc 60
ctggcggacg ttttttcgt gaagcaaaca acaacaacaa caactatcg tcgcgcaatg 120
cttacagtga aaccccatca caacttggaaatggat tttcaacat ccctgcgaga 180
acgaactagt ttgtaagagt accaacgaaa agatcccgtt ttttaacgct ccaatatttc 240
tggaaaacaa gacgcagatt ggcaaagtgg aggaaatatt tggcctatt acagacgttc 300
actttactgt aaaaccagtg gaagggttat tagctacttc tttggtgta tgagacaaat 360
tctacatcg ctcaagagaaa ctgctgccgc ttgaaagatt tctcccaag ccacctggta 420
gtcagagt 428

<210> 4471
<211> 182
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-A4

<400> 4471

agagatatat aggtgttaggg tgaagtgggtt gctagttct tgaatgcttg gttttgcatac 60
aagttatata ataagtatttgc caatagctcc ataaaatcgc aataactagtg ttcttttgg 120
gttaaaacaa gtctcacaga acagttgaaa gctcgcttgg tccaataaaaa aagaaaaact 180

<210> 4472
<211> 202
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-B1

<400> 4472

cgggtcgagc cacgcgtccg cccacacgtc cgccccacgca tccgggtcggt agcgctattt 60
ccctggcttt attttcgacg gatgaatcct ttgattccga cgaggaatga ctgcttcctc 120
aacaactagg atcgcgttga aagaagatata ccaaagtttc tttctagata tatacggtaa 180
agataaaattc gaatttgattt gt 202

<210> 4473
<211> 424
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-039-Q1-E1-B10

<400> 4473

gtactagtct agaattcccg ggccgaccca cgacgtccga tttaatcggtt caagagacac 60
acgactagaa aagcttacgt tctgttagatc tacgagtcgc aactattcac caatggattt 120
tcctgtacaa aagctacagg aggaagagaa agaaacttta atagacactt tgccctatgt 180
ggaagaaaac ctcttggaaag actcagaaac ttctcgaaag gtcgctagcc tacttgagca 240
ggaactgagc caagtgaaga agaagaaatg ggaggaacaa cagacacagg ggtttctggc 300
aaacaccctt gttggaatag aagttcaaag aatggaggac gggttccctt cggagtatga 360
aaatcctttt acgagatacg aagttctca cccgaatatt acanaacaag gggatttcaa 420
cacg 424

<210> 4474
<211> 430
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-B12
<400> 4474

gtactagtcc agaattcccg ggccgaccca cgcgtccacc cacgcgtccg gaacgcaacg 60
cggcgcatcg aaaattcatg atgaagttgt tcgttagaaaa ctcaaagtat ccgttgg 120
cattccaaag acgatagata acgatattgc acttattgtat aaaagtttg gattcgatac 180
agcagtagaa gaagcacaac gagccattcg cagtgcagtt gttgaatcga aaagtgcac 240
aaacggtatt ggcttagtga agcttatggg taggagttca ggatatatttgc caatgtatgc 300
aactttggct tcgcatgatg tggatatttgc ttgattccc gaagtatctt ttatgg 360
aggaagttgt gtgttttag aatatatccg cagcttgg 420
cattgttgg 430

<210> 4475
<211> 413
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-039-Q1-E1-B2

<400> 4475

ccgggtcgag ccacgcgtcc gaccacacgt ccgaaaagac tcaagtaatt gtatatttgc 60
ttttgggtgt gttgctgtan ggcaaatacg agttcccttg atccggacaa gttcaaacaa 120
gaacaaaaag ctcgctggaa tcaaggagct ttatccacgt ggaccctgtg gaaaaaaaaact 180
caagtagaag atactccagc aaagttcttc ctaaggcttag tacctattcg accaggagtg 240
aaaatcttag accttgcctg tgtagtggg gaaacctccc ttcaagttgc tcaccttagtt 300
tccagccact taaaggatga agccaaagac gcaaagatag tttgcgttga tatttcggac 360
gaaatgctta aagttctcaa ccaaagagca caagaaatgg ggctaacaaa tat 413

<210> 4476
<211> 404
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-B3

<400> 4476

gggtcgagcc acgcgtccga gagcatatgc cgtcctcctc ttctagcgat catttttc 60
ccggaactaa aaaaaagttt ggaaaacttg ggcggttccg aaaaaggccc cgatatatg 120
agaaaaagaa tggcagtaag gttcctgtt aaaggcagtt gaaacgaaca acaaacaagt 180
gtgggataat tccaattcaa gtaacgcttc aaaacggcaa agtgaagatg gctatcaagg 240
ggaaaacaaa acctaggat atatccaaag agttatttcc tgatttagcc aagagagcta 300
tagtggcagt ggtcaacgat aaactgtggg atctgaatag acctctagaa gaagattgta 360
gcttggaaat atgtgacttt gaaactccag aaggaaaatc agta 404

<210> 4477
<211> 281
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-039-Q1-E1-C1

<400> 4477

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aaaatggata tttggctagc aatccttgag gaatacgtgg cctatccttgc atcgacaatt 120
atttcaagta tctgtatgtc aaatttatcg aatacaatgc gaaatgagaa agcgagtgg 180
tgagtttcc gatgaaacgt ttgccaccga atttacaaga cacttgctct ttccctgtca 240
ctctacttga gtataaagaa tttatgtttt atattccgtg g 281

<210> 4478
<211> 395
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-C11

<400> 4478

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tgactgtata ttcaattgtc attgttcacg tataacttccg tgagggcttgc agcttgcgtg 120
ttttgtcgtg catagtagacac ctagagattc tggaaactgga agtttcgaag atctttgagc 180
aagtcccaac agaattgacc tctgcagatg ct当地tcatc ccaagaaatt tcactgagtg 240

aacaatttca tatgcagcgt gagtttttc cttacgcaaa ctatggacgc atttttactc 300
gaagatttga gctttgtctg tgaacaccag agtcagaata taatttatcc atgtaaagtt 360
tgccgcttg ttcgtaagtg aatgacactg tgtgt 395

<210> 4479
<211> 206
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-C12

<400> 4479

gtactagtct agaattccccg ggccgaccca cgcgtaaga gttggccaag cacgcagtt 60
cggaaggaac caaggcagtt acaaagtata cttcttcctg aattcaaggt tgataaatag 120
actagcgtac aagtgtttt gtgtgtttt aaaaagttgt atggttgaaa agcgtcgatg 180
tacaacgtaa aaagaaagtt ttttat 206

<210> 4480
<211> 419
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-C3

<400> 4480

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tcttgttctt ctcacaagaa tatgtatctc tttagctgca tggtctgact cagtcatgtc 120
tcagatgcaa agtatttttgc tcaagaattt cactaaaaat cgtgcattag ctccattatg 180
ccttagaggt gctttcacg attgctggaa tggatgtaac ggagcactgt tgcttccaga 240
ggaaataagt agagctgaaa acctcggtt ggaacctcta aaaccatatt tggaccatt 300
tctcagccag tttccttgc ttagtgtac tgacctgate aactcttgcg ccgttacagc 360
tgtaaagttc ctaagtggtc cagatgttcc tgttactttt ggcagaatag ataccggag 419

<210> 4481
<211> 401
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-C4

<400> 4481

acgcgtccga agacaactat tctcgtgctc catcgtttc tagccatgtc tcagagaaat 60
tattgcgaaa tagcaatact tctgagttc gcgagccaca cttgtatcga gactctcaga 120
ataatccgga gaatactttt ttgacagatt tacctgcgaa tgaacaagaa aatatgagac 180
ggctatcatt tcgagattgg agtctcgac agtcactcga tactgttact cctgctgtat 240
ctagaccgat tgctgttcat ggacaaaaat attcacctca aacgacgaca agagaagctg 300
ggtcggatat ccgagcggaa cgtgaacttt ggcaacggaa aggacatttgg tgaagtttt 360
ggcgacgacg atttgctgct atactaccac attctgtttt t 401

<210> 4482

<211> 404

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-C5

<400> 4482

cgggtcgacc cacgcattca gcgtggagat agagcaacgg cagcacaaag tttagaactt 60
cgagttccgt ttcttgatag agactttctg gatgttgc当地 tgagtattca tccgcgtgaa 120
aaggttactt ctaagcatag aatcgagaaa tatatcattc gttatgcctt ttccaaggag 180
ttttgtggtg aagagtatct tcctgacgat attctttgga gacaaaaaga acagtttcg 240
gatggcgtgg gctatagctg gatcgatggt ttaaaggcgt attgtaaaa ggccgttcc 300
gatgcagact tgcaaaatgc cgctcagcgt tttccgcacg atactccaac aaccaaagag 360
gcataatgttt atcgagctat attcgaaaaa cattttggaa attg 404

<210> 4483

<211> 323

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-039-Q1-E1-C6

<400> 4483

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actctacgtg caacttatct tgtgacatac aatcggtggt canagttata tgctagcgta 120
tcatalogatgg tacatgtgta gaagatgtca gcacatgttc ttgcggcttc agcattacaa 180
tggagtttct atcaaattatgat tacaatcaat acttgatggt ctggttaat gatgataagt 240
ctgtcaatgt ccaggataat agatcttcga aatcgcaata agggtaagga agaaaatcct 300
ttggcttagga taagtaagga aaa 323

<210> 4484
<211> 235
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-C8

<400> 4484

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ctgttagcata tgcttccaac tcccgtttct ctcaagtata cgtgaaacag ttggtatctg 120
cagttggtct aagtatcggtt atcttggta tatcgatattt gtcaccctct ctccttcctc 180
gtccaaactgc ataaagtttt ttcatgttcc aaaagccgtg aaggacatca ataat 235

<210> 4485
<211> 416
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-C9

<400> 4485

ccgggcccac ccaaacgtca acccacgcgt ccgaaaacgt gtgttagcaag ctagagcag 60
aagaactggg tgtaaaggc gagtagtaga gtaagtgtaa aaggaaagg aaaggagaga 120
aagagaaaag ggtgaaatg cagagatctc tagagaaagg caagaaagaa aagaaaggaa 180
gacacagtaa atgaggcgag aaagcatagg aagtggaaacg gatttaggaac ccgtgtagtc 240
tatgcagtaa aagaaagaat gagtaagaaa aaagggagtc attccaccag gggagtaag 300
gcgcaagaaa gaaacccaaa gcaattgacg ggaatcgaa aaagggtgg atcacgtaaa 360
ttaatccgat gtaaaccgag aaacttacct ctccaagaaa gtgtttcacg gctgtc 416

<210> 4486
<211> 414
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-D1

<400> 4486

cgggtcgagc cacgcgtcca agaggagatg gtaatgataa tagcatgtat ggttagtccat 60
tggagcaatt tgaagtggta tcgctgtata agatggagat agaaggaacg gaaatacggaa 120
taagtaacat acgagtgtat ataataatga tgagtatagt atggtaaag aagatggaga 180
ggaggataat gaagaagaac gggacgtggg agtggatacg agaggagtat tacagagtga 240
taggaaggat agtaaaggag aatgtacgag aggagaggttataaag gattacatga 300
acgacgagat aatatgagaa atgataacgt ggatataat atcgataata agtggagt 360
aaacagaaaaa cgaagtaaaa cgacggaatg aacggaagtt atggcaaaaa cacg 414

<210> 4487
<211> 412
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-D10

<400> 4487

cgggccgacc cacgagtcaa caaccacatt gtttgcacgc gaaatgattt gatgacttat 60
gatgaccctt cagtagttct tccaaaccagc ggtaaccctc aactatccta gtgaaaaagg 120
acctctttct cctcgttta gagggaaaca tgctttttaga agatatccat ccggacagga 180
acgctgtata gcttgcaagt tatgcgtatgc aatttgttca gctcaggcaa taactatcga 240
agcggAACCT cggcctgatg gttcaagaag aaccacatga tatgatattt atatgacaat 300
gtgcataatat tggatgtt gccaagaagc ttgtcctgtt gatgccatcg tagaaggctg 360
caatttttagt tatgcaacag aaacgcacga agagttgctg tataataagg aa 412

<210> 4488
<211> 414
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-D11

<400> 4488

aattcccgaa ccgacccacg cgtccacgag aagttgtaaa acttgggttc agaaccaaga 60
aacatttacg agaacaagg tatgcattta ctgacccaaga tggtgtttaga acaatgcaac 120
tggtatcaga gttccttgg gacgtttga aattccttgc gacagatcct cagactgaaa 180
tatcagcaact agttcgagaa atattgaagg atatgagcag tagctctagc gaggagcaaa 240
tgcagcgtgg aagcggtgcc aaaaaatcca gtgagcatat ggatgtcgca tcgaacgcat 300
cttccttgc ttcatcacca gtttcttgg aagaagtcat gcatagtaga aaggattctc 360
ttccgagaag ctcgaattcc atgcctcgat tcatgtcgat agaaggaata agtc 414

<210> 4489
<211> 430
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-D12

<400> 4489

aggtacaggt ccagaattcc cgggcccggacc cacgcgtcca attcgcttgc ggcgtgtgaa 60
gttttggta ccttggaaata atgcagatat ttgtaaagac acttacaggc aagactataaa 120
ctcttgaagt ggagccttca gatactattt agaacgtcaa gtccaaagata caagacaagg 180
aaggaattcc tccagaccag caacgttgc tatttgcgtgg aaagcaacta gaagatggtc 240
gtactcttc agactataat attcaaaagg agtctaccct tcacttggta atgcgtttga 300
gggggtggaat gcagatattt gtgaagacac ttacaggcaa gactataact cttgaagtgg 360
agccttcaga tactatttgcg aacgtcaagt ccaagataca agacaaggaa ggaattcctc 420
cagaccagca 430

<210> 4490
<211> 439
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-D2

<400> 4490

gggtcgagcc acgcgtccga gttgatggtc gtttccaaga tgttcagggt aaagtagaca 60

| | |
|---|-----|
| cccaaaactcc aagtatgttt ctcgatattt aaatgaaacc tggttgttata atgaatccac | 120 |
| aaatatctca cgaatctcgat tgctttatata acgttttaca aggcaaagct ctatttggga | 180 |
| aagatgcttg tatttggaaagt gcacacgagt ttttgttattt ggtatggagaa gaagatcata | 240 |
| tctgtgttca aagcaaggaa gacagctgtc gattttgtt ggttagctggg aaacctttga | 300 |
| acgagccccat cgttcaaatat ggaccttttggatgtacttag ccaagaagat attatgaaag | 360 |
| cttttcgaga ttatcaaact ggaaagttttt aaaatttgcgg aaataaaaacc attttgttata | 420 |
| tcccaactaa aaatgttata | 439 |

<210> 4491
<211> 349
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-039-Q1-E1-D3

<400> 4491

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gaagactgaa ccaggaaaag tatcaaattc gattggctat tacgccgtat ttacaagccg 120
aacatgaccg tttggaagtg aaagagacgc atcgtcgtct tcggcaagaa gcagaactta 180
tgaaggatgt tcctgaatat caaccggag aaaatttcta caaaaacaaga aagtttactc 240
cctatgtcaa accgctagta cctggagttg gtccacaagg actttgacag ttatctaaag 300
tgtatggttgc caataaagct ggaatggagt ttagtttgt qcacaaaaa 349

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<210>    4492
<211>    371
<212>    DNA
<213>    Cyanidium caldarium

<223>    Clone ID: LIB190-039-Q1-E1-D4

<400>    4492

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gctcgagttt catgcacgtc atcaagtaat gtggaaagtt ttggggttcc acccgagtaa 120
aaggaatggt atcaaaaactt tatgttagttc gggttgtgaa tgaaggttcc tagaatqatc 180
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tggactaat gtttcagta gtaaaatggt gattacttgc taatggaaag acacgcgagt 240
tggccaatacg tgcgatatacg tggttattgca gggttcatgg aacatggcga aagtatagaa 300
gatgcaattt atcgagaagt aaaagaggag acctttattc aagttggtcg ttgtcggtat 360
cattcttcac a 371

<210> 4493
<211> 407
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-D9

<400> 4493

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taagtttatt accaggagtg ctcgttggat gtttcattat aggcttagt ttccgagcta 120
gcaacatcca tgtcgaagaa ggaatttaca tttgggtat cataacatat tatatgttt 180
ggggttctgg tatggacact tatgcttgg tactgggatc gaaaatatac ccaacttata 240
ttcgaagtga aggaatggcg ctatgttactt ggtggacata cattggaaac tttattacga 300
cttattgctt ttccaagatg aaaagagcaa tgactgctcc aggaatttc attggtttt 360
atggaggttt tggttactatt gcttggttct atgccatgtt tatgatg 407

<210> 4494
<211> 410
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-E11

<400> 4494

ccggggccgac ccacgacgac aggtcggcag cctgttgagt tatcggaggt taaaacgtcc 60
tggaaatt ttgcaaatacg agcagtcttc aatgaggatc cagttttca atgcaaacct 120
gtttcaggaa tccatgtgaa tcgttattcca aggagtctt tgcttctgg agacactagc 180
aacccttcga gctttgtga gatcgaaaa cattgcgtatc gacttggatc tgaagcgacg 240
ttccttggaa tattgcggaa taaggctgct gagtcgttcc attctacagc aaaaatggca 300
ggacaatttgcgtcatcact aggaacaaga acactgattc taactcattt cagtagcaga 360

tatgaaacca acttttacaa gtcgaatggc caagtttgg acgaaacttg 410

<210> 4495

<211> 432

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-E12

<400> 4495

ggtagggc aggaagtccc gggccgaccc acgacgtcag gtggaaagaa gatgcaaagt 60

gctttgaaag aaatagccga ctatatggtg acacctggaa aaggtatttt agcatctgat 120

gaacctccccg agttgttaga acccaagttt cgagcttgg gagtggagaa caatgcagaa 180

acgagaagga cgtggcgtga aatattatat ggaaccaaag gattggagca atatgtgca 240

gctgctattc tgcatagtga aactttgaa caacaagatt catccagtgg gaaacgtttg 300

gtagatgtgt tatcagacaa aggtatatta cctggtatca cggtgatca aggttcgat 360

atattacctg gtacctccca agaaacattc acgctaggat tggatacttt gagcaatcga 420

tgtgagaaat at 432

<210> 4496

<211> 440

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-E2

<400> 4496

cgggtcgagc cacgcgtccg cacaagtagg cacagaagag aatatttctc atcagggtac 60

aatagtagaa gaggcaacgt cggaatcttt aagtaaaaaa gaaaacgaac aaggtgcgt 120

tgagcaagaa gaagcagaag aagatagcca tcaacacaca catgaaggag gacacgcgca 180

tgaacacaca gcagaagagg gaacaaccag acaaagcaa gcggagaaga aatctagaaa 240

agctttgcag aaattgggtt taaaatcagt ttcaagggtt acgagagtaa ctatcaagaa 300

gaacagaaaat attctgtttt ttatctcccg acccgatgtt tacaagtgg ccgggtcgaa 360

tacttatgtt atttttgggg atgcaaagat agaagatctg tcagttgctg cacagactgc 420

tgcagctgaa caatttaaga 440

<210> 4497
<211> 399
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-E4

<400> 4497

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acaaaagttt acgtttccct tattatctga tgaaggcggt aaagtacgca agctatacgg 120
tgtaccaaag agcatgttta ttatgcctgg tcgctgcact tatgtcattt gtccggatgg 180
tattgtacga cacatctaca acagtcaagt acgtttcgca aaccacgtgg aggaggcaaa 240
gaaggcgttg gaaaagatac gaaacgacgc tcaaacagca gaagagtgaa cacactagac 300
tgctttgtgg tttctttgat aagaagaggg ttccagtcat gtgcttcggc tggtgtggca 360
agttactttt ttagttgtgt tgaataaaacg tttttttt 399

<210> 4498
<211> 431
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-039-Q1-E1-E5

<400> 4498

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acagaagagg agttatgaga gaaaagatgg aagtaataga agtggtaagt ggagtaataa 120
tgaatcatat gaaaagaagga atggagaata taaggaagga ttacatgaag gaggagataa 180
taggagaaat gataaggtgg atatatatat cgataataag tgtgatagta atataaagga 240
ggagatagag aggaaagagg tgtatgatgc aggcaaagaa gtgacgcagt agattagaga 300
gtaacacatg caagtaggta aagcgaacgg gtgagtaaag aggtgtgaaa gagtggaaaga 360
acatgaaaacg acagaagaat gtaagaaatg gtttagagtaa aaaccataaa ggaagtaaaa 420
gcgggaatct g 431

<210> 4499
<211> 467

<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-E7

<400> 4499

gtaccagtct agaattgccg ggtcgaccca cgcacccgag aaggatattc tgcactacta 60
tggtttgagt acaaaaaggag ataggaatgc gcttatttagg aggcataaag aattcggtaa 120
gtaagttaca attcaagcga acatcatctg agtagattct caagtcttc gctataatgc 180
tgagctggat tcaaagttcc ctcgtcctgt ttctgtccgtc ataaaggata tcgaagaatg 240
ggagaagcaa caggagtgga tgaatgttcc tgaggaagcg tctaaacttc cattaggaag 300
gccactccct gtcaataatg atgcctgtca cattgtcacc agtgatttcg aatcactcgt 360
ccagcaagca aagagaacaa ggtaaagac gggaaacaac ttttgcgt caaactttta 420
tgaagaaagc atgggtcaag atgatatatc agtgtttact caacaag 467

<210> 4500
<211> 454
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-E8

<400> 4500

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cggaatctcc atgtatcctt gttactggcg agtttggttg gtcggccaac atggaacgtta 120
tcatgaaggc acaagctttg cgtgattcgt cttggcaat gtacatgtca tcgagaaaga 180
taatggaaat taatcccaac aatgccatca tgcaagaatt gcgtcgccgt gtggaaagcag 240
acaagtcaga caagaccgtg aaagacttgg tcaatttatt atttgacact gcattgttga 300
cttccggatt ctctcttgac gattccaacg ttttgcctc tcgaattcat cgcatgatta 360
agttacgtct tagcattgac gaagatgaag tcacagaaaa gatggaggaa gatttaaccc 420
ctctcgagac cgaacaggaa ggaacgtctg cgat 454

<210> 4501
<211> 413
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-E9

<400> 4501

ccggccgac ccacgagtca gagaacacgt agaccggag attcgagaga aattcgaaca 60
agacttagta agagcggaca gggagaata tgcttgtctt ctggaagaaa ataaccctcg 120
tcatttcctg gcgcattatca tcctgtggg tcagttccca cgaatatgt tccgtaaaga 180
cgcaaaagcg tttgcgtggg ataccaaagc gttgcgtta tcaaagcagc ttgtttcttc 240
gtctttggac aagaagcttc gtccaatcga gagggtttt gcttatatgc cgttcgagca 300
ccaggagaac ctacaaagtc agtctgaggc aatgagactc tttcaggaac ttaaagagga 360
aacctcgccg attccggatg aagcaaccaa ggccaagttc acagaattca cag 413

<210> 4502

<211> 186

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-F3

<400> 4502

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atgaaatgca aaaatctcta gagaaaaggc aagaaagaaa agaaaggaag acacagtaaa 120
tgaggcgaga cagcatagga agtgaardgg attacgaacc cgtgtagtct atgcagtaaa 180
agaaaaa 186

<210> 4503

<211> 189

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-F5

<400> 4503

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aaaaaaaaa ataaatgaaa cagaaggcaa tgcgatcgct ggggttagtc attggtacaa 120
cttcgatcaa aataccagtt cttaacttgc tgtcacatag tttcaattcg ttggcaatcg 180
tatttcttg 189

<210> 4504
<211> 292
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-F6

<400> 4504

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aaggaggaa agaaagattc ttcaaagaaa gaagccacaa gtaaacctgc agcagcagat 120
gctacaaaga cgacagaaaa gtctggtccg gaagccaagt tgaaggaaac tggtgcaaag 180
aaacaataaa aagttgacta tgcatgtgca gtcctgttat gttttgtgag ttctgtttga 240
tagtttccag ctattctttt ggttagtgaat aaagagaaaaa ttttttatat tt 292

<210> 4505
<211> 287
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-F7

<400> 4505

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gaatctttt tgaagggtgt taccgagaac ccgtgtgaag agctttggag agcttacgag 120
agatgtgtaa agagactggc ttcttccaga aatcttgaac agctattgac ttcagactgg 180
aatgtggacg aacaaaaaagc tgcctacttg acactcgatgc attccagtgt agataggacc 240
acgaataaaa aattgtttac ttgaaaaaaaaaaaatttt taaattt 287

<210> 4506
<211> 409
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-039-Q1-E1-F9

<400> 4506

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cagcagcagg tcctggtgcc tttgacctt cgggtttagg accggaagac caaggcaagc 120
ttatggctgt tatgcaagat cttcagatac aagattctct taggctatac aacgaacttg 180
tacaacgttg ttttggtgaa tgtgtcgaaa cttttagaag taaaaaactc gatggaaagg 240
aagaagcttg tgttacgaag tgtgcacaaa agtttgtgaa aatggctgct agagtaggac 300
agagattcgc agaacagcaa cagcaacttg ttgcagaagc gcaacgagga tccacgcccgt 360
cttcctgaaa taaatgtgaa ccaactgata gaggatcntt ttgtttctt 409

<210> 4507

<211> 309

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-039-Q1-E1-G1

<400> 4507

gggtcgacgc cacgcgtccg accacgcgtc cgctagcaca acacggattt gcacgcaact 60
ctatgtggca cttgaaacaa ataggtacaa cgaaagatgg ctcagccact ggagtctgt 120
tgtctttatc ttcaaaagat gtggatgctg catggacctc tgcgtggcct tatgctttta 180
ctgccccata tcagttgtta tangggtttc aaggtccaca aacaattttc ggggttcaaa 240
ttgagggaaa ggatcctttt ccttaactt tggctttca aactaatttg gaggtaccga 300
agttcccaa 309

<210> 4508

<211> 400

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-G11

<400> 4508

gtacaggtct agaagtcccg ggccgaccca cgcgtccaaat caaagtaaag aaagaaggaa 60
aaggagaaga agagagggta ggcttagaag cagcaaacca gagagggaaag cgttaaagca 120
tgaaagaaaa gaaatccgaa aaagaagaga aaaaggtaag aaagaggacc gaatcagggt 180
aagaggtaga ggagcaagaa gagaagagag aatgctgggt ggagtagcga aacaagagaa 240
ggaaagtaaa agtaagaaa gaggaaaggt ttacgagaga aggaagtaga aagaagagag 300

tgtaaggcg cgtcataata gaaatccgaa aggagtagaa gaaaagagag agaagaaaga 360
aaagaagaga aaagccgtac tgaagaccga cacaggtact 400

<210> 4509
<211> 127
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-G3

<400> 4509

cgggtcgagc cacgcgtccg acttgaacaa tgttgcaaa gactgctctg agttgcctct 60
ttctctctt ccttatcgct gccgcagttg cagccgacgt agttcagag gagagatgg 120
gatatgc 127

<210> 4510
<211> 307
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-G5

<400> 4510

aattcccgaa tcgacccacg catccgagga gattgggtgtaa aagagcctt gccaagccc 60
caaataaata caatacaatg ctgtcattgg tcgttcgtat gatttgttgt ttcactaagt 120
gcagtcattt tgaaatatgg agtaaacata atgaaacctt gtatgagaaa aaatcactaa 180
tcaacatcag atgttctact tgagtacatc ctttgcaaa agtgcgacaa cttgtttcag 240
acatactaca acttcaactg catacctatg aagactactt tgtagaacta atggctgaag 300
aaaacta 307

<210> 4511
<211> 436
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-G6

<400> 4511

ccgggtcgac ccacgagtcc acccacgcgt ccgcccacgc gtccgcacgt gtggatattg 60

tggagaagag atggagtcga agcaatcttc atgatgcgtg gaataactagt ggtgcaagtg 120
aggataacga acaactgcaa caagtgatag acaggttgc tacgtggcaa aataagaaca 180
cttggacat taaaaacgaa tcctggagca acaagcagaa caatatcaaattatagac 240
tagtacgtca acaactacag tatctcggtt ggaatgccgc gttgcaaga caatggaaag 300
tcgttagttgg tggtttgcact gccttgcact agtgtgaaga gttgagagtg gtgtgaaga 360
acttgcatac cgattggttg gcttggata gagatggct agaaaagagt caggttgcgg 420
ggtatgtttt gttgtc 436

<210> 4512
<211> 366
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-G7

<400> 4512

gggtcgaccc acgcattccgc ggacgcgtgg gggaaatgaa aagaagagag tgtaaggcgg 60
cgtcataata gaaatccgaa aggagtagaa gaaaagagag agaagaaaga aaagaagaga 120
aaagccgtac tgaagaccga cacaggtact cgaggagaaa ggagacccaa attaaggta 180
gagaatggac gataaggaac tatgcaaaag gatatggat ctgcggtaga acatatgaaa 240
gaagcagcac cgactgttta gcaaaaacac agcaactctgc agaaaagaga aaatgtaaag 300
tatagagtgt gcggcctgcc aaatagttaga gaagaaatcg atgaaagtga aagcgagtaa 360
aagatg 366

<210> 4513
<211> 452
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-H1

<400> 4513

ccgggtcgag ccacgcgtcc gaccacacgt ccgcacacgc gtccgcacac gcgtccgc 60
acgcgtccgc ccacgcgtcc gcattgtga attttctgt ttctttact tgtcttttg 120
ttgagttatc atggcacgaa caaaacaaac agcacgcaag tctaccggtg gtaaggcacc 180

tcgaaagcag ttggcaacca aggcagcaag aaaatccgca cccgttaactg gaggagtcaa 240
gaagccccat cgttaccgtc ccggtaactgt cgccctgaga gaaattcgca agtaccagaa 300
gagcactgaa ctcttatcc gaaagttgcc tttccaaagg ttggttcgta aaattgctca 360
agactttaag acggacctac gttccaaac ttccggcggtg actgcccttc aagaaccctc 420
gggagcatac ttggtcgggtt tgtttgaaga ta 452

<210> 4514

<211> 418

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-H10

<400> 4514

ttcccgggcc gaccacgca tcagtgttgt tggtgggtcg tcgcgttttg gtgacaagga 60
aagataaaatg gtcgtcaaaa cagaaacctg tagttttca ggtttccgca tctaccccg 120
aaaaggcact cgatttgtgc gcggggatgg caaaactcctc atcttagta accgcaagtg 180
caaattctac tttcatatgc gtaggagacc ggcagagttg aattggactc agttgtatcg 240
aagaatgcac aaaataggac agcaagagga gacacagaag cgacgtcgta cgcgcaaagt 300
tgctgctgta ccgaaaccgg tggaaggcgc gtcgttgaa gtgatcaaag caaagagaac 360
gcaacgcggc gaagtccgaa aaactgcca agaagcagcg ttgaaggaaa tcaaacaa 418

<210> 4515

<211> 165

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-H11

<400> 4515

aattcccccggg ccgacccacg acgtccacgc gcaaatcgag ttgcgtgttt cattttttct 60
ttgcagtgca ccgcttcgtt cttttcttct catcgaaaaa cagttcaaca actctggttg 120
caaaaaacag cttggatgaa ataaaagaac ccacgacttt tatct 165

<210> 4516

<211> 414

<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-H12

<400> 4516

atccccggc cgacccacgc gtccacggac gcgtgggtt ccatcctatg aataataata 60
ataataacaa gcaagacttt ggtattattg ttactttatg gaaacaagta acagtgacac 120
aagatggaaa agtcctttg gataccttcc taactgctgc aaaggaagtt ttacgtgtgg 180
tagatgcctt tggttcaggc ttccgcatgg taaagaacga tattgctgga aacatcaaaa 240
aactgtatcg tgccaatcaa tctgttcaag ctaccacgtt acaggatctt gtcatatcag 300
aaaactctcc agatgggttg gctactgttg cattgttatg gttgaaaagg taaaagtcct 360
ctctcgctt tgtgtcctag agacctcacg atgaatgggg tgcagagctt ttca 414

<210> 4517
<211> 424
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-H3

<400> 4517

gggtcgagcc acgcgtccga ccacacgtcc ggagtagcga aacaagagaa gggaaagtaaa 60
aggtaagaaaa gaggaaaggt ttacgagaga aggaagtaca aagaagagag tgtaaggcgg 120
cgtcataata gaaatccgaa aggagtagaa aaaaagagag agaagaaaga aaagaagaga 180
aaagccgtac tgaagaccga cacacgtact cgaggagaaa ggagacccaa attaacgtga 240
gagaatggac gataaggaac taagcaaaag gatatggtat ctgcggtaga acatatgaaa 300
gaagcagcac cgactgttta gcaaaaacac agcactctgc agaaaagaga aaatgtaaag 360
tatagagtgt gcggcctgcc aaatagtaga gaagaaatcg atgaaagtga aagcgagtaa 420
aaga 424

<210> 4518
<211> 433
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-H5

<400> 4518

gaccacgca tccgaccacg cgtccggcaa aaaatgtctc ctcgcttcca aagtattctt 60
ctcttctcgtaatcggtgc tctgtaatat cgtctgccac tcctctaagt 120
gaaagatggc aaagttctac ctccgtccaa gagacatgta agacagtctg tattcaaacg 180
cagatatgtt caactccaac acctacacca actccaagtg tttctgcgca acaaggaaac 240
gtataccgct ggagttagac gtatgcaact cctactccaa caccaactct tgtttgact 300
tatgttccgc agtgcactca agtttgcagc agcaaattgc caagtcagac aacttctgcc 360
gtagaaagca acagttatac ctccctttct actcaatcct ctaccacatc aacatactat 420
tatggtgctg ggc 433

<210> 4519
<211> 302
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-H7

<400> 4519

gggtcgaccc acgcatccac aactacttac cagtgtggtc agtacgagtc ccaacaagtt 60
tactaccaat gccaaaagta taaggagggtt actcagcaag aatgccagta cgtccaagag 120
tcgtattgtg tcgagttatga agaatgtcag caagttaccc aggaagtttc tccttcagaa 180
attgtctact acggtaatc ttcttcttagc agtagttact actactagaa cacttgtgaa 240
atgcgcaaag tcgcaaagta gagtgttctt ttttgaataa actgttactt ttgtcataa 300
aa 302

<210> 4520
<211> 433
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-H9

<400> 4520

agttacaggt ccagaattcc cggccgacc cacgcgtcca cggacgcgtg ggcggacgog 60
tgggttctgg aaggctgaaa atcctgtcga ttcaagcaa tcgacatatt tattctgtaa 120

aagaacacaa caaaatttta caacttcgt ttcatagttt tggaactaac ttgacatgca 180
acaaaagtaac ctgcgttag tccaatctc tttggggca agctttgtcc tcattctaag 240
tataatctgt gccattcatg cagtaacagc cgatgaaata acaagttcg agagaggata 300
ccaaacagtt gcaccaactc agacgcagca atgtcaaaag atttgtgtca ccgccacaca 360
aactcaagtt caaagttgta tttatactca gacacaggct ccgttcatgt ctcaatgtgt 420
cacagcattg cca 433

<210> 4521
<211> 424
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-A1

<400> 4521

taccggtcta gaattcccg gctgaccac gcgtcaaggc aacttccgc ggagcgtggg 60
tgtgtggtgg ttggggacga cggtcacgt ttggatttg gtggtatttgc aatggcgacc 120
aacagaataa ccaaatacgat ttgcacacttgc ggtatcgacc ccccttctaa ctgtggcgc 180
ggcccgtag gggacgacct ctttcaactgg ctagctacta tcatggccc tcctgactcg 240
cgatatgccg gtggagtgtg tttcctcaca taccatttc caaccgacta tccgttcaaa 300
cctccacag tgcaatttag cactcgata tatcaccgaa gtcttacctc caatggatt 360
atctgcttga ataatcttcg cgaccaatgg agtccatcac tgactagctc gaatgtgcta 420
ctgt 424

<210> 4522
<211> 415
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-A12

<400> 4522

cggccgacc cacgcgtcca tgacgttcca cgtttttttt gggcccttgc tggggtttgc 60
ctcttttgc tgtcactacc atcagtgca ataacttgcata gatatccgtt gactgaaatg 120
acagacaagg ttggtgacta cctgaactgt gtccaaatcg aacgagtgc tgccattgc 180

aacagaggac ccaatgaact gtttgcaga ggagcactt ctgaactaca gtacgtcctt 240
ttccggctta tctaaagttag gagtgaggc ttcccatacg tgcatcgac gagacaagta 300
taccggtttg tgtgtcgatg gcgaaacagc aacacggttt taccaggagt cttgtcctca 360
agtctattct tctggcataa aagacaagga tagtttgtct atgaacaagg aaaaa 415

<210> 4523

<211> 454

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-A5

<400> 4523

aatgcccgcc cgacccacg agtcaggtgc ccgttcacag caaacgcagc cgccagac 60
ctgaattttg gagacgaata cacggagaac ctcagaaata cgatacagaa ctccccaaacc 120
cccaagaaga tatatgaagg tctcaatgaa tatgtcgtag gtcaagaaaa ggcgaagaag 180
gttcttgctg ttgcagtcta caatcattt aaacgagttt ccctcaacga atactggct 240
tcccttcgt cgaaaacagg agaagtca gatgctggca caagaggaa tggggcgca 300
agtaactttg atgggaggac tcaggactt cgtgtcgccg aagttcagtc tccttcaaca 360
gaagaccttg cttcaatagt gcctcagaga ctaggtttc cctcaaggca ctccattgtt 420
catcccgca cttcttagc aagggctat acta 454

<210> 4524

<211> 445

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-A7

<400> 4524

ccggggccga cccacacgac agcccacgac tccgcccacg cgtccgtgag aatcatggta 60
gacactaagc ttaaggacgg tgcttagtgct gctctttgga cttggccggccg atttcttat 120
acagttgtgt tagcattttc agcaacaata attggacttg atggaatgaa ggcagataac 180
atatggaaacg atgccctata ttatcatggt aaagtggta acctttgtgc atattcggct 240
tcgtcagttt ttgaaaagtgg cgaccatggc gcatgtaaat atgtgatggc tttggcttct 300

atcagcttga ttttagattt ctttcttggtt ttggccgcct ttgtcgacgc attgtatcca 360
attcttacaa agttctggtt tgtggagctt ggtatcaaca tattccttac tatgtggtgg 420
ttggttggtg caatttatgtg actgc 445

<210> 4525
<211> 223
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-A9

<400> 4525

tacggtctac cattcacggg ccgaccacacg cgtccatgcg atatacaggt gtagggtgaa 60
gtggatgcta atgttcttga atgcttggtt ttgcatcaag ttatataaga attattgcaa 120
taggtccatg aaatcgcaat actagtggtc cttttgggtt agcacatgta aaggggacag 180
gattggagca acaaaggaaa tggataaaat gcaaaattgt ctg 223

<210> 4526
<211> 300
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-B11

<400> 4526

gcgtccaccc acacgtccga aaggagggaa tgaagggaaat ttatggcaaa aacacgtgcc 60
agcagcagcg gtaaaacgtg tgttagcaagc gtagagcaga agaactgggt gtaaaggtcg 120
agtagtagag taagtgtaaa agggaaagga aaggagagaa agagggaaagg gatgaaatgc 180
agagatctct agagaaaggc aagaaagaaa agaaaggaag acacagtaaa tgaggcgaga 240
aagcatagga agtgaaacgg attaggaacc cgtgtagtct atgcagtaaa agaaagaata 300

<210> 4527
<211> 446
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-B5

<400> 4527

gaatccccgg gcccacccac gacgtcagtg tggtcgtcc tggcggttgg ttgcattgg 60
ggaaagcttc atgacttcac tacctcagtt attgacgtgg aagagagaaa agtctgtgga 120
taagaagcca agtgaacagt ctcatgcaga ccgaatggta ccagatggtt tatatgaagt 180
gagagctatt caacttcctg gaggttcgtg gagacattat tatgtagacc acgcttccaa 240
gtcgacgtat tggattcttc cgtatctca cccggatggt ttacgtcact cgttggaca 300
agaagtggac tacttacctt cttatgagga atgtgtaaag gaaacaagtc ctttggcgg 360
tcctaataatt tcttcttctc gttcttcatt ggaagatgag tagtaaggga atgttgggg 420
cgtagtttat gcagatggtt tttgg 446

<210> 4528

<211> 243

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-B7

<400> 4528

aattccccggg ccgacccacg cgtcagcccg tgcgcacccct gactccggag tggattgaag 60
cagagcgtcg caaagagttt gcaaaggagc gagagtcggg cccgccagtg gagcttgatc 120
ctatcttgca caggcgtggc tatcaccact agatagttcg attatttcag tgatttgg 180
gcagaacagt tgttgaggaa tgtgtgataa aataaaatgc ccaaagatgc gcttctt 240
tct 243

<210> 4529

<211> 321

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-C1

<400> 4529

acccacgcgt ccaggttaat tcgtcgatcg catctcatcc tggcgtaggt tagcctagtt 60
gaagtataag catacaagat gagttcttgt acgtatctca aaggcatctt tacatttgg 120
atagcatatg catgcgtgga ctaatcttct tctatttcag acacggaatc atactcacta 180
tcatgataag gtgacggtca tgtcactcct acgatatcac cacacgatgc aggataatac 240

ttaattctg acaagttaat atccagttag ataacatata aaccatgtcg atctgacact 300
cgatgtcagt tcatalogatcc t 321

<210> 4530
<211> 438
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-040-Q1-E1-C6

<400> 4530

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gaccgggctt tcgttttgtt ctgtttggag gtttggccaa tgccgcagta gaaacgtaca 120
tctttagtgg aaagagtttt tggacttttc atctgcctca tcaggcaa at gagagcttaa 180
aacctgcttc ttcttgtaa aagatttagtt atccgaaacc tgatggaaag cttaactttt 240
atatcttgac atccgttgcc ttgagtgta ccaatcatga tcacgaccaa cctccgcatt 300
taaaaagtcaa agaccgcaaa gtagtggaaag atatcaattt gaaggatata gccccgtccag 360
aaagtagata ctgtcctgca agagtttatg aatatgtaga agacgattcg ggacaaccaa 420
agttacaaat caatgctc 438

<210> 4531
<211> 397
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-C8

<400> 4531

gtacaagtac ggaattcccg ggccgaccca cgcgtcagcg gacgcgtggg cggtcgctg 60
ggaatgaata aagacttgat ttggcaacgt ccaagttct ggttcaaggt tgcaaggttt 120
agtggagcag ctgctgttagg tttggagcc tttggtgctc atggactccg ggcacgagtc 180
acagaccctt atttgttaca aatatggaat cgtgcggcaa gttatcacca gatacatagt 240
tttagctgttt gtgctgcagc ctgttgcata aatagcgagg gaaaacctgc tttttagca 300
acgtcggtt tctctcttgg aatagcggtt ttctctgggtt ccctgtatgc tttgacttta 360

actgtgaacc gaaaaactgg tgcagttact ccgttg

397

<210> 4532

<211> 400

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-D10

<400> 4532

cacgcgtcca ctctacgctt gaactaaaat atccctttctt atttgggtga gttcatgttc 60

aactaaggaa aagttggtat ccagataagc attcaactgtg ttgagttctt cctcaatgtt 120

catggaattt tgccaaattt cagcaagttt cttgtaatctt ttcgtaaactt catgttgcatt 180

attggtaatg atggcttgca tatctgactc aacttgcgtc atgttgcagc ttatattcaa 240

gttatacagc ttagttttta ggtccactgtt attattccat atttcaacaa gtttcgtata 300

ttccaccgta aattcttggttt gcatggtgaa gataattgtg gttaaacatg ttgggccacc 360

gtagaactgt aattgatcaa tatggataga gcatttgaac 400

<210> 4533

<211> 406

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-D11

<400> 4533

gccacgcgtc cacccacgctt cccgagaaga tatttcaaattt cctgaacgag tataagcttt 60

cgttgctaca ttcataccaa gcagttgtgc agctttcata aagaaagatg ttagattact 120

tggcagctcc atctcaacgc catgagaaaaa gtctccgtttt ctgaaaatcc ttacttggca 180

agactcttga ctatttatata aggacaactc ggaacacttg tttgataggt ggttatacat 240

cttttctttt ccagaagaat ctcccgaga agacttgtga cgggaacggc gccgactagg 300

aagagattct tttgaaactt ctgtggaaaga ctcactttgg ggaatatctt ctccccctgt 360

acaacttact accaaggaat cctcatctat catatcgaat atgctt 406

<210> 4534

<211> 448

<212> DNA

<213> Cyanidium caldarium
<223> Clone ID: LIB190-040-Q1-E1-D2
<400> 4534

cgggcccggacc cacgcgtcaa cccacgcgtc cgccccacg tccgcccacg cgtccgcccc 60
cgcggtccgca ttcaacgaac gatgaaggttc cagtagtta gtctttatt ggctcttta 120
tgcgtaggtt ctgctctggc tgctgaattt gcacctggaa ttgcggaaaa accggtagag 180
agaggatatg aggaaccctg ctgtaccgaa tattgttatt gggaaagaat atgtatcaca 240
cccacaccca cacctacacc aacctactat tactattatt acgcaagaaa tgcaaaacag 300
gaaaatgtcg agagaagcgt agaaaagagt atctcttccg cagaaaaatc tgatgcggtt 360
cgagggtatt tccccacgta ctactattat gagactccta catattatta ctattatgag 420
actccgacat attattacta ttatgaga 448

<210> 4535
<211> 344
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-040-Q1-E1-D3
<400> 4535

cgaagagatt tcaattcgct tggcttaagt atcgatgaat tgattgatgc ttatgttcag 60
acgggtttgg cagtagtagc tatcgataga atggcacagt ttttgggcc taacgggttg 120
ttcaataagc accttttaac ctcgggtggac aacgatgagt atttacttga cgagattctt 180
tacgatcagg agaaccatta gtcatgatga acaatgattt atgtatacag tttccatccc 240
atatgtaaat atctatttgtt ggaactgaat gcggtgttag tacttacccc aataataaaa 300
ggtaatatac acagacatga agacgttgag aaacagttca aagg 344

<210> 4536
<211> 427
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-040-Q1-E1-D5
<400> 4536

acccacgcgt cagctgaagc ccagttggc acttggatca ctatagtaat ggtactttgc 60
tattcttgg aaactccaat cggtatatct attggatttg gtattgcaca cacttatcag 120
gaaaactcct cgcatcttt gttAACGAGA ggcattttgg atgccatctc cggtggaaatt 180
ttaataataca caggattggt ggagttgtt acttattggt ttacgcgcaa ctcgaacttt 240
ttaagacgca aagccatatac tatttttagt attgtggat ttgtctggtt aggagccatc 300
tgcattggcga ttatcgagc gtgggcctaa gaataaaatt tgTTTgagac gtcgtggc 360
agatgactcg catgtgtggt agttggttca agtttgacaa gaganaacat ttgttgctac 420
ttcttac 427

<210> 4537
<211> 409
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-D6

<400> 4537

gtaccagtca ggaattcccg ggccgaccca cgcgtcagcg gacgcgtggg cttcaagttg 60
ttgtataaaa tattcgagaa aagttgtagt cgtttgtcac gagtcagaac catctttcaa 120
aaatataatgt tatcttttt taatattatt atgccatgtt tcttgaagct ttacccgcag 180
atgttataag gaacatatgc tgtcattttgg acgggtgtatc actagctaga ctttcctgtta 240
cctgtagaaa actaagaaac gtttgcgcag atgaagctct ctggtttgct tgtctcaaaa 300
gggaagtttt ggaagatgta aaggaagagt ttgtcctttc cttaaacaaa catgcgcaat 360
atcaaagaag ctggtataag atctatcagt cacttcatgg tgccgcacg 409

<210> 4538
<211> 451
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-D7

<400> 4538

aattcccggtt ccgacccacg cgtcagcttt gtcgagggag aggattcgac ctgttctcat 60
gtttgtgggt tggtttcctg caagttggat atggaaacaa ccagcaacaa ctactcaaag 120

aatttcaagt tatcactgga taactacaac atggatatct ttgaaaatga aacgtcatc 180
ttctccaaac caccacaccg taaggttcc tctccgcattg atgaactcg agaacaagac 240
gcgaccccgtaacttgcaag agttgccttt gattccgatc gacgaaatat actcgaaaag 300
tttcgttgg aatcgaattt gttgctatgc ctgtacaac ggtgaccaag cactttgtt 360
tgtaagttac accaaaaact tgcacagaaa gattgcctt cacgccaagt tgcaaccaga 420
gaattgcaaa ttttacacag ctttgcgt a 451

<210> 4539
<211> 462
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-D8

<400> 4539

gtaccaggta ggaattcccg ggccgaccca cgcgtcagca tatacaagct gcaggcttc 60
gcttcaacac cagtataatt cccattgatt tatgactttc caacagtggta tgattatgg 120
tattgtcttg cagaaatgaa tcaaggatgaa aaacagtaca tgggagaacc acagagttag 180
gcttggcgac aactacacag ctatgtcaag gaacatagtt ctcacaagct ttccgatgg 240
tctgtcgta ttcgattgaa cattatctcg atggcattt aatccgaccc agtagcataa 300
tatacgcatt gtgtgttctg ttcgagaaaa ttgggtgcta tgccttgat aacggtgacc 360
aagcactttt ttagttaagt tacaccaaga acttgcacag aaagattgcc tttcacgcca 420
agttgcaacc agacaattgc aaattttca aagccttgc cg 462

<210> 4540
<211> 394
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-D9

<400> 4540

acgcgtccac ccacacgtcc gcccacgcgt cggcccacgc gtccgcttgg gcacagattt 60
agttgcgtgc cacgaattat gaagaagctg ctgtctcgat ctctttggat gagccattgg 120
aacctaccaa tggcaaacctt atgctcagat agaaagtgc tgggtcattt 180

tggacaacgc ctatcattac tatttgaagg ctcttgagtt ggatccaaac aatgttagtag 240
ttatggcatg tctggcaaaa ttggaagcga aaaagggtaa tgttgatgaa gcaaggagta 300
tttttagaaa agctatttagt ttggacgaga aagtgcgt atatatgcata gttggccaa 360
cgtagaactg tgattgaaca atatggatag agca 394

<210> 4541
<211> 372
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-E1
<400> 4541

cggcttagaa aatccgggcc ggcccacgcg tcaggacata ttggataggg aatgtatcga 60
tgtatacgat gtgaacagtc taatgttata aagtgcagg aatcacgagt aaggtctagc 120
gcgacgtgtg ggttcttgcg atataaaaca aggattgtac agcactgca gactgtcctc 180
aacgcattt gctgttgtgg tagacagtaa gttacgaaca gtagtgacg acgaaaaaat 240
ggtacaaaac aaggcggtca ctctaaagga tactagctt cgtagtcgtg catacgacgg 300
tctaaatcgt aaagattgac acgtagatac atttcaatag ctgtcatatg agtacattat 360
gactggaaaa ac 372

<210> 4542
<211> 411
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-E10
<400> 4542

cggccgacc cacgcgtcca cccaaagcgctc cgccggacgcg tgggcgcaat gacggtagg 60
ctttcatctt ttctttttt cttcttgggt ttttactgct ataacgcggt gctcaagaaa 120
cttagagtga atccgaacca aacgagcgag gttttgctgt gacagagcga taaggaagtt 180
gaagtggaca gacgtctttt gttctttca ctgccccaca agtgcggaaag agatccgctc 240
ctgccatagg acaaaaacaac tagtcaactga gtacaacgtg cgccggcgca gggcattcta 300
gcagcactat actattcatg agcttagtaca agactacgcc ataacagcct cgttcgcaga 360

atagtagaaat ttttctgcaa acaagcttg gggacagagg agacaacaga g 411

<210> 4543

<211> 439

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-040-Q1-E1-E2

<400> 4543

gggccgaccc acgcgtccac tcattgttgt gtcgtgcatt ttaaaggaat aagttagttat 60

tattgatatg gaggctgcgt taagtgcagt tagtggaaag tgtggacag agtttaaaaa 120

ctttcagcac tgtgttagcag caaatagaga taactggag gaagtttta gacctcagaa 180

agcagacttt gccaaatgta cttctgaaaa tatgcagttt atggacttgg tacgagaggg 240

ttgttttttg gaaattcgac aatatgaaag atgcctcaag gaaaacagga cagaaccaac 300

cctgtgttag gaaaaacgaa aacaagtctt ggactgtggc gacactgtta ttgcacacaa 360

ccaagaagac tcggaaaaca ctccatagaa aactatctat tatgcacacaa cagtgtgtta 420

ttccatanag aaacgaaca 439

<210> 4544

<211> 462

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-E6

<400> 4544

ggtaccagtc aggaattccc gggccgaccc acgcgtcagc ccacgcgtcc gtttagatat 60

tgtgaaagat gggagtcaaa gttggattata atgggtttgg gagaatttgg aggctagttc 120

ttagagctgc ttggagaaaa cagtctgtat atgtggtagc tatcaacgtat ccctttattg 180

atggacta tatggtctac atgttcaaata atgactctgt gcacggcgct tatccaggtt 240

cagtggtagc aaagaatggaa aaacttgcg tggatggaca cgaaatggca gtgtttgcct 300

tccgtgaccc tagtgagatc cttggtcct ctactggagc agaatatatt gtggatcaa 360

caggagtatt tactgctgca gataaagctc gagcacatat gaaggaaatg gctaagaaag 420

taatcatttc tgctccggtc aacgacgctc ccatgtttgt ga 462

<210> 4545

<211> 392

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-E7

<400> 4545

atccccgggc cgacccacgc gtcagcccac gcgtccgggtt acatatcgta agtaattgaa 60

gtcagcatta gtggtaacga gttggtaga atgagtaggc tcatgcgtag gaatactttg 120

tggaaaggtag ctgtatgtat atgcaactga caccaatctc gttaatgatt tagtcgagaa 180

cgacaacatg gtcatgcgtt aacactggcc ataggactga tcgaattgca gttgaatcat 240

ttgatactgt ttttatcgta gatgagaacc aagtggtagt gtatgccttc cgtagaccta 300

ctatgattcc ttagacatct gatggaacta attaaagtgt taaatcgagt agtatagtta 360

cagctgcaag taagactcga gcatataatg aa 392

<210> 4546

<211> 365

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-E8

<400> 4546

aattcccccggg ccgacccacg cgtcaggaag aagaagccat ccaaattgcc aacgataactt 60

cgtatggttt aggtgctggc ctgtggactc gagatattat gaaagcttat cgcgtatctc 120

gagcaatcaa ggctggcgt gtttgggtt actgctatca tgagtatcct tctcatgcgg 180

cgtttggtgg ttataagaag tcagggttt gtcgtgaatg ccacaagttg actttggagc 240

actatcaaca attgaagaac attatcatca gttactcacc acaaccact ggtctgtttt 300

aagtttgaga ttggagggtt tggtgtttgt ttgtgtgagt gttataaaga atcatgtgtt 360

ggtgtt 365

<210> 4547

<211> 400

<212> DNA

<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-040-Q1-E1-F2
<400> 4547

cggccgacc cacgcgtcca cccacgcgtc cgctggttg gcggagttat gcagtggatc 60
ttccaccgac ttggaaattt ctgctcaagc agttggaaat acgtttgaag gttggggAAC 120
gtcccttgca tggtttgcCA atgttagttgg taagggacct acagaacgca aggagcgaat 180
ggcagacctt cttttgacg aacaacaggg cctacgtttg aatattgttc gttacaatat 240
tggtgttggA gagaatccaa atattcccgt tacactcgAA cctagagctt gtatccctgg 300
tctttatact agtgcCcAtc aagttaattc tctttactg gaacaagata gcggccagtt 360
gtggttttta catgcagcgg tganaagagg agttgacaag 400

<210> 4548
<211> 441
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-040-Q1-E1-F4
<400> 4548

gggccgaccc acgcgtcagt ggagaggatg ctgccttg tgaatacAAA tcttgTTCTC 60
cagagatcct taaaaAGTC gtctgaatcg tttgtAAAC agtgttGTTT ccaacAAAGA 120
agtcttctat cgacAAAGAA gttcgtCAA ctacgagttc gaatATGTt tacgaataacc 180
ctcttctgtA gttctcaga agcaccAGTT gacgagatAG atgaaACAA taaaAGAGCT 240
caaggTACTG aactttcgCG agctgATTCC gacttGTTAA agttGCTT gatGGGAAT 300
attgtggag tacaacaAGC acttgcAGCT ggCGCGAAAG ctggagttCA agacaaggAA 360
tgacgaactg cgttacactt ggctgCCGCT attgggtttc atccttangt gaaATAATAT 420
tacaagctgc tggagatctc g 441

<210> 4549
<211> 247
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-F6

<400> 4549

aatgcccggg ctgacccacg cgtcagcgtg gcagccggaa gctttgtat atgggttgtca 60
ttccttgctt tgtttatatt caaaaacaga tcgctattaa actatttcaa caatttgtac 120
aagaagaaga ggaaagatata caactcaata aagtagtatg gcacttgtat cattcctaaa 180
aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaggag 240
gaagcac 247

<210> 4550

<211> 375

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-F7

<400> 4550

aattcccccggg ccgacccacg cgtcagagat aatgcgttgc cacaacgttg gtatcgattt 60
gaagccatcc gtgcggtaa ccaagctatc ggtcgagtga tacgacatga gaaagatttt 120
ggtgcgatta ttctttgtga tgaacgtttt ttagtatgt ctcaccaact ttctcggtgg 180
atacagccat ttgtacgtca ttattctttt ggacagttgc aatccaactt gcatcagttt 240
tttaagcgtc gagtatctgg tggaaagaag agaagtgaac aaggagaggt gttgtcttca 300
tcctctccaa agaaaactcc caagttgagt gcgggagatg aagcatattt atttcaagcc 360
atgggaatgg agcct 375

<210> 4551

<211> 362

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-F8

<400> 4551

gtaccagtca agaattccccg ggccgaccca cgcgtcagaa gccaacagca gttgagcaca 60
gcaatatcga tatgtcaagt ggctggaata actatagtgg aacggcaggc aatgggaatg 120
ctgggtgctgg tcaagggaaag aacacggata agaagaccag tggagaactt gcaaaagata 180

gtttaaacgg gttggaaatg gcagccttgt cagcggtaa gctggttat cgcggtggca 240
agtggtgtgt ggataaagtg gaaggcgcca ttgacgacca caagtcaata ggaagtaaga 300
gtggctgtgg tggaaattca cgttattctc gttgaaacgt aataacgtgg atagaaacag 360
aa 362

<210> 4552
<211> 405
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-F9

<400> 4552

acgcgtccac tttaggatcg gcaacgcaat tccgagaaaag aaaaattgtt gaggcacacg 60
agtgtcggtt ctatgtctat aggtatggtag tttatcgaaa gggactatgtt aatatgttac 120
aaaagtcttt aaaagatgtt aaagatgctg ttcgtcagga gaaaatcaaa gaggactttt 180
ctaaaagcga atatcacgtt acaaaggag agaagatcg tgccaataga cttcaagcac 240
aatatgcaag aaaggcaacg aagacttgaa atatgtcaa tacgctgtt gaaagacagt 300
cgagaggatt ctaattggat atttgtatgt ggaggagcta aggaagaagg tgataggaca 360
agggttgtat atctatggt atagttgtt tatctagtt tgatg 405

<210> 4553
<211> 385
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-G11

<400> 4553

acgcgtccag acaaatggcc aacgctggtc aagatggcct tgtgcaagtc aacaaacata 60
gagaagtaaa gagattgcaa gaagataata ttttgaatag agcactatca caaccaggag 120
atgtatttct gtgttttgc aacatccagt ttttggtaa tgcagaaaga gctattatag 180
gaaatattac ttgtccagaa agtacgtaat tgtgtcgat attagctggc catatagcgg 240
tttgggttcga tgaacattt gatgacttgc gtttggaaagc tatcttggc gcactatgtt 300
gtacttgttta ctgtgagtgg aagcggtttt aaggagaatt ggggtacaa gaatggatg 360

aattggacaa gatatcttcc ctaga

385

<210> 4554
<211> 83
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-G2

<400> 4554

cggtaagta tccgggccga cccacgcgtc aaagaatatac ctccgggtgg gtgaaaagtt 60
ggcggtgggt ggacttaatc aat 83

<210> 4555
<211> 440
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-G3

<400> 4555

ggccgaccc acgcgtcaga aaagttcaaa tattcattgt gtacctgaca gtagaactgc 60
attgaatgga gaaaaggatt gtagacgtgc ctttgacac atgatataga atgactgctg 120
ctgccgtatt cactgcttct tgagcttcc aatgtcactt ggctccacaa tcctagatag 180
gattcttga caagatatgt agggtatcca ttccctccctt atccatcctc ttcctgataa 240
tggtcaccca aaggttgctt tcaaccaagt actctgtgag aacaattccg aagtgttttt 300
ttaagaagaa aatttgtgaa ggccgcctga aagcttgac tcggctctgg gtcgatacag 360
aaagcatggc aaaatttta ggatgaagaa caaaagcaag gatcgagacg aggatctatt 420
gtcatcaatg caaaacacga 440

<210> 4556
<211> 258
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-G6

<400> 4556

gtacaagtaa agaatgcccggccgcacccacgcgtcagcc cacgcgtccg cccacgcgtc 60

cgcccacgcg tccgagggct tagggtgat accttggcat ccagaagcga tgaagggcgt 120
ggctaccaac gaaatgcttc gaggagctgg aagcaagctt tgatccggag gtacccgaat 180
gaggcaactc tttatactgt ctactgaata tataggtaga taagagcga cttagtgaac 240
tgaaaacatct tagtaact 258

<210> 4557
<211> 445
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-G7

<400> 4557

aattcccccggg ccgacccacg cgtcagccca cgctccgca cggacgtatt ctaaaggatg 60
atgtttaga atattttagc agcacaggaa cgacgagcaa gaagcaacag cagcagcaac 120
aacaacaaac agaacagcaa aagccgaaaa gtatcgccga ccagtcttct tcagttactc 180
caagtgagga tagcgcaact catagaacat atgaagatat tccattgaat aacatgcgca 240
aagttattgc tcgtcgattt acagagtcca agtctcaagt acctcatgaa tattgtcaaa 300
ttcaatgtca actcgataag gtatttagt tgcggaatat ttggaagaag gaaaggaatg 360
tgtctatttc cgtaaatgat tttgttattc gagctactgc agttgcattt agacgagttac 420
cagagttgaa tatacgatgg gatga 445

<210> 4558
<211> 392
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-G8

<400> 4558

aattcccccggg ccgacccacg cgtcagcgaa acaagttgaa tcggaagcta ttttaagaga 60
actgctcgta tgtctcattt aacgtatgaa agttcaaag gatataact tgctcttggc 120
ttttacagaa atgctcgtag aagcttcggt tcataagagc accattggtc atatcgctaa 180
tcaacgtctg atgttctacc tgatacatcc ttttgcaaaa gtgcgacaac ttgtttccga 240
cagactacaa gttcaactgc ttacctatga agactacttt gtagaactaa tgggtgagga 300

aaactatcaa caagcgatac aaattttgga acaagttagaa tgggataaga cctcccccata 360
gaaaactaaca taacatagga atcgactttg ta 392

<210> 4559
<211> 444
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-H1

<400> 4559

cgggccgacc cacgcgtcca gccacgcgtc aggtttaccc atcaatcttc tcagctctca 60
tatggatgtg gtccctgtag agactctaag ttggtcaatg gatgcatttg ctggatagt 120
ggaaaacggt acaatgtatg gaagacgtac tcaggatatg acgagtgtta ccattcaata 180
tttcaagca cttggaaacc tattacagcg tggatggaag ccagatcgaa ctattttgt 240
ttccgtagtg cccgatgaag agattggagg gacgcaagga atgggagtgt ttgtagagtc 300
ggaagaattc cagaaatgga atattggtt tgaattggat gaatgattgg ccaatcctga 360
ctctttatg tgggtgtatt atggtgagcg acagccttgg tggtagtttta ttggagctat 420
cgatcagcct gcacatggag caac 444

<210> 4560
<211> 375
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-040-Q1-E1-H10

<400> 4560

gcgtcaatta cgacccgcta ttcccgatcg tggtttgcc acttccatac atttggggag 60
cagggagacg cacggtcgag ttgatgacga tcgaaagcca caaatggaag cgccaattgt 120
acgtattatg aaggccagaa agtatttgga ccacaacaat ttggtgtccg aagtgattag 180
ccaaactacaa tctcatttcg tgccggaacc tgcaagaaatt aagcgaagga tcgagagttt 240
gatcgaacgc gagtttttag aaagagataa taacaaaaaa agttatcgaa atattgcgtt 300
agaagctatt tgtgtgctct gtaggctgca caggtagaag ataaaggaga gcatgttttt 360
tttacaaacc aaann 375

<210> 4561
<211> 433
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-040-Q1-E1-H2

<400> 4561

cccacgcgtc agaccactcc aagaangtgt tgcacggctg tcgaaagaac gtgctgtgaa 60
gtgagagaac gtacgagaaa gccaaagttag gaaaagaagg caagtagagg gcggcccgag 120
aaaggagagg gcttaaagacg tgatacagag taagaagaaa agagaagaga gctagaaagg 180
aggtaaaaga agagtaaaag gactagaaga ggtacggaat tcacgaagaa ggagcgtgaa 240
ggaaggagga atcccaagta atcgaggaag aaaaagcttc ggtgaaagcgt tgaacggatt 300
ttgtacacac tgcccgtaa gttctggaag tgtgctaaga ataagcaaga gaagttagaag 360
agagtaagaa aagaagaaag gaagtgaaga cgtaaaacgt gtgttagcaag cgtagagcag 420
aagaactggg tgt 433

<210> 4562
<211> 287
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-H6

<400> 4562

acccacgagt cagaacacat gcaagtaggt aaagcgaacg ggtgagtaaa gaggtgtgaa 60
agagtggaag aacataaaag gactagaaga ggtacggaat tcacgagggaa ggagcgtgaa 120
ggaaggagga atcccaagta atcgaggaag aaaaagcttc ggtgaaagcgt tgaacggatt 180
ttgtacacac tgcccgtaa gttctggaag tgtgcttagga ataagcagga gaagttagaag 240
agagtaggac aagaagaaag gaagtgaaga cgtaaagacgt gaaacac 287

<210> 4563
<211> 372
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-A10

<400> 4563

attcgagctt tcgcagatgc gttggtagtc attccataca ctttgccga gaacgctggc 60
ttaccatcca tagaaaatcgta tacgaaactg agaaaacaaac acgtacaagg agataagaat 120
gcaggaatca atttcaaaaa gggatgcata agtaatatgg ctgaggaaaa tgttgttatg 180
ccttgcttg tgacagttag tgcttgagg cttgcaacgg aatgcgtccg aatgattctg 240
aagatcgatg atattgtgat gactcgctag aaaagtccctt ggtgttattt ggaaaataaa 300
aaggttcatc ataaacaaaa ctaatgataa ctggtaatcc tcaaaaagct atataaataa 360
cgtatgcagg aa 372

<210> 4564

<211> 385

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-A6

<400> 4564

cgggtcgacc cacacgtcca cccacgcgtc ggtgcagatg cagctgtcaa acataccgtc 60
aaagccgatg ttgaaaggat tgtcggtagt acaccatgag ctccccagga agagatagct 120
cgagtgaaga cacctttgcg cgatagcaca ctatctcgac tacctggaga cactggacca 180
aggatttga agcctggcggt ctgtaacatt aggaataagc cagggtatata tcaatcaccg 240
ggttagaatg gtgacgcaca tgtgcagtgc ggacgtacat atgaagctgt gactcacact 300
acgtcacatg aacttggta gaggaatgtt accgcagtaa gtgatgtac atatgagtcg 360
acttccataa tggacagttt tgaga 385

<210> 4565

<211> 442

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-B2

<400> 4565

acgcgtccag tcttgacaaa actcgaaaac tatttatttc ttgttatttt ttttagaggtt 60

tttctagagt gtgttttg gagtttgt actccagtct tggtggttgg tgaaaggctc 120
tagtgacaaa gagggttgtt actttccgc cattctccac agctccaacc atcaacttgt 180
atacggacac atatacataa ctatgttcgt acatagtcgt ggtgtaaaaa gcgacaattc 240
gaatggttgc aaaggcttga tgaaaagcaa aggaccagtg aaggtgttag agaaagcact 300
tgaaaaaggg ggacacttcc gtgtatattt gtgcccctag taactaacta attcctcttg 360
aagatattgc aagtttggtg tactaaacac gaattgcaag tgtagtata agagagtgt 420
tacgtgtgtg tactgtgttt tt 442

<210> 4566
<211> 448
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-B6

<400> 4566
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caaaaaacaca gcactctgca gaaaagagaa aatgtaaagt atagagtgtg cggcctgcca 120
aatagtagag aagaaatcga tgaaagtgaa agcgagtaca agatgaggta tagagaatgg 180
cggtcctaac tgtaaggatc caaaggttagc gaagtaataa gacgttgaa aggcgccag 240
tatgaaagga gaaacgagtg tagcactgtc tagtcgtcca actcagcgaa acagcaataa 300
ctgtgaaaat gcagtaaact agcagtagga cgaaaaagacc ccataattct tgactagata 360
ggtttaggaa ggagagagaa tcatgaagta gaggaggtgg ggtaaagagat gaaagaccac 420
tgcatgagga taaaatct aactgagt 448

<210> 4567
<211> 239
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-B8

<400> 4567

gacccaaacg tccacccacg cgtccgccc cgcgtccgat cattttcaac aataataata 60
ataatagtat aataataata aaaccaatcc ctttgacaac aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa 180

aaaaacaaaaa ataaaaagac aaaaaaaaac aaacacaggt gcaaacaaaa agaaaaacc 239

<210> 4568

<211> 422

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-C1

<400> 4568

gtcgaccgac gcgtccgacc acgaatccgc ccacgcgtcc gtcattgtg gtttctgcca 60

tggcggaaagg tatactacag gatcgcttg agaagcttct gccttataat cagacctgg 120

attttatata accaaagata gtatttacg tatgcacttt tattttctct gtcgtcattg 180

ctgctctgggt cagtaacgca gagtttaata tatttgataa atccccaccg aatattcatg 240

gagacttttg tgcatacaag gcgtcactag ctgagccagc tggcgtgact gccatttgca 300

agtacccat agcagtaggt gctctggcc ttgtgtttgc tataaggttt gttgcattct 360

ctctatggac cctttggca catcgagtga ttgacttatg gtgggtcgaa gccttgttga 420

at 422

<210> 4569

<211> 454

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-C2

<400> 4569

ttcacgggtc gacgacgcgt ccgagaatac tatggcaagt cttttggaga atcccggtgt 60

ccaacaaatg ttgcaaaata tgtttcaga tccttccact gtagaatctg ttcttatgag 120

taatccccag ttgagacaaa tggtgaaatc caatcctcag atgatgataa tggtaggaa 180

tccagacttt ttaagaacca tgtcgaatcc tcagttttg aggactatgt ttcaagttaca 240

acaaggcttt cagtcgagca acccaactag tacttcctcc tcctcttatac catccagtaa 300

taataataat aataatacga atactttcc atccaattca tctggtgcta attatatgcc 360

agatatgagt gcattgtttt ctcttttagg tgccaacaac aacaataccg catccttgc 420

agattcagct attgcgaata tgactcaaga acag 454

<210> 4570
<211> 438
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-C4

<400> 4570

ggtcgacgac gcgtccggaa ataacagaaaa aacttgcctt atggcaacat cgggggtgttt 60
tgtgcgccaa taacagcggt gagtgcgccg aacacgtaat gccgatgtcc gaatcactca 120
attgcatagt tgcgtgaaca aagtgaagat ttcatgcgaa ggaggacagg cttagttac 180
ttattctgtta ccaaaaaaagc atggatagaa ctagagcctg gaattcgtat tggactgcat 240
gcattaacaa aatttccaat ctaatgaaga gatgttccccg ttgtgtatcc aatctagaga 300
gtaagggctt cgctctatac caaaacatgg atatctttag agtctggagt ttgccgtttg 360
ctagttaga gtccctctgt tgattcctga cgctgatgcc gtcctcctgt atctctcttg 420
agggatggtg caaaaagac 438

<210> 4571
<211> 445
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-C5

<400> 4571

ttcccggtc gaccaagcg tccagaaaaa ggttaagaaaa aaggaaaaagg aaaaaaaaaaa 60
agggaaagggtt aaaaacaaca aaccaaaaaa ggaaaccttt aagcaataaa gaaaagaaaat 120
cccaaaaaaga aaaaaaaaaag ggtaaaaaga aggaccaatc aaggaaaaaa ggtaaagaac 180
aagaagaaaa aaaaaaattc cgggttgaat taccaaacca gaaaaaggaa attaaaaggt 240
agaaagaagg aaaggtaac aaaaaaagga attaaaagaa gaaaattttt aggcggcttc 300
atattaaaat tccaaaagga ttaaagaaaa gagaaaaagag aaaggaaaga agaaaaaaac 360
ccttctggag aacgacaaaa gttatccaag aaaaaaggaa acccaatttta aggtaaaaaa 420
ttggccaata aggacttagg caaaa 445

<210> 4572
<211> 418
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-C6

<400> 4572

atccccgggt cgacccaaac gtccagaatt gtgactccaa atatggcaag tggaaaccgct 60
gatgttaggtc tgataggctt agctgtgatg ggacaaaact tggtaactgaa tatgaacgac 120
catggattta aagtagcggt ttttaacaga actgtctcaa aagtagacga ctttcttaac 180
ggagaagcca agaataccaa catagtgggg ggcgcactcgt tgcaagagtt ttgtggtctt 240
ttgaagaaac ccagaatcat tattcttctt gtcaaggcgg gtgaagcagt agatcagttt 300
atttctatgc tcgtgccact tttgtctagt ggtgatctca tagttgatgg gggaaactct 360
cactttctgg acaccagacg aagaacgaaa gaacttgaag ctaaaggact gctttta 418

<210> 4573
<211> 446
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-C7

<400> 4573

ccgggtcgac ccaagcgtcc attccaattt agctctttc ttctgtgggt ggtgtgtgg 60
gacttggatg aaaacttatac tctttgttcc gtcttgttct tgtctttcta caaaacttgc 120
aagtggaaaa caagtagcag ttgattcaag ttggaaaaga tgtggacagt tcaaggaaaa 180
tcgttccttc ctccatgctg ctccctggcac tcttaacaaa gcaagggtcca ggttttctgt 240
ttccatgaaa accgaagctt gggtaaagtt gataaaaact gagcaactaa agccgggaga 300
cttgaaacct ttttcgttg ctggccagtc tttgctagta gtatgtgact atgacggtca 360
agtataactgt tctgccaacg tttgtccaca cttggaaaca ccattggatt aaggaacgg 420
atcttagtgtt aacttggatat gtgccc 446

<210> 4574
<211> 291
<212> DNA

<213> Cyanidium caldarium
<223> Clone ID: LIB190-041-Q1-E1-C8
<400> 4574

acccacgcgt ccgcccacgc gtccggtaca ttcaacatca tcaaatagcc aaggaggaa 60
agaaaagattc ttcaaagaaa gaagccacaa gtaaacctgc agcagcagat gctacaaaga 120
cgacagaaaaa gtctggtccg gaagccaagt tgaagggAAC tggtgcaaag aaacaataaa 180
aagttgacta tgcatgttcc tggatgttt tgtgagttct gtttgatagt ttccagctat 240
tctttggta gtgaataaaag agaaaatttt ttatatttaa aaaaaaaaaac a 291

<210> 4575
<211> 134
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-041-Q1-E1-D1
<400> 4575

cgtccgctcg acaaccacca atactactag caacgaaaag aaggataaat tgagaattag 60
tttcacgag tttcaggtac taaccaatcg aatagctcta ttcttaagac gaaacgatgc 120
agaaggagtt gctg 134

<210> 4576
<211> 255
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-041-Q1-E1-D11
<400> 4576

aaggaggatc caccctaacg tatccatgca tactacgtca taactcttct aaagtgtcac 60
ccaaattcaa ttccacaaggt cgacttatta gacccgtt actgaaaaaa ccctgggta 120
aaccaccctta atcaccttagc ataacatccc cctttcacaa cccgtttaa caaccaggag 180
gaccacacaa atggcccttc ccaatagttg ttcaaacaaa ttggcaaatg gaaagcgcca 240
tgtaaccgcc catta 255

<210> 4577

<211> 455
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-D5

<400> 4577

ccgggtcgac ccaagcgtcc acggacgcgt gggcggacgc gtggggtcga gagggaaaaaa 60
gcccagaagc caagataagg tatcaaagta aagaaagaag gaaaaggaga agaagagagg 120
gtaggcttag aagcagcaaa ccagagagga aagcgttaaa gcatgaaaga aaagaaatcc 180
gaaaaagaag agaaaaaggt aagaaagagg accgaatcag ggtaagaggt agaggagcaa 240
gaagagaaga gagaatgctg ggtggagtag cgaaacaaga gaagggagt aaaaggtaag 300
aaagaggaca gtttacgag agaaggaagt agaaagaaga gagtgttaagg cggcgtcata 360
atagaaatcc gaaaggagta gaagaaaaga gagagaagaa agaaaagaag agaaaagccg 420
tactgaagac caacagtaaa caattggtt tacac 455

<210> 4578
<211> 459
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-D6

<400> 4578

attccccgtt cgacccaagc gtccagtgtt ttggattgcc cttgtcgct atcatagaca 60
cacgttaacc ttggtccatt actactagga atgacccttc gtaaaccagt cttaaccaaa 120
gtaaaaaaaaac tacaacccgg gacacagggg cacaacttga tcgttcaagt gatgaacgtc 180
ggtgagggtt tggaaaaagt gagaccgagt ggtgacaaac tgcaaatcgc cgaagtgcta 240
cttgcagatg aaactggagc ggtattatTT acagcaagga acgaacaaat caaactttt 300
aaaaaggag agtgtgtgac cgttcggaaac gcaaaagtca atatggcg aggctttatt 360
cgtttagtag ttgacaaatg gggagctatt aagccgcctg gaccaacgga aaagttacaa 420
tggacaccaa aagttaaaaa caatatttc aacatagaa 459

<210> 4579
<211> 215
<212> DNA

<213> Cyanidium caldarium
<223> Clone ID: LIB190-041-Q1-E1-E11
<400> 4579

acgcgtccga ccacgcgtcc gagcatttc agcaacaata attggacttg atggaaggaa 60
ggcagataac atatggaacg atgccctata ttatcatgga aaagtggta acttttgtgc 120
atattcggt tcgtctgttt ttgaaagtgg cgaacatggc gcatgttaat atgttatggc 180
tttggcttct aacaacttga ttttagttt ctttc 215

<210> 4580
<211> 343
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-E2
<400> 4580

ccgaccgcgtc cgagcgccaa ctctaggcaa actttgggtt tatttcgg gagtggtttt 60
tcttaggtgca gctgttgttt tgtatggttt gcaacacgt aaattgccac tagagagagt 120
ccagtttgca aaaacctttt caaagccgt ttcaaaagca gataatcaag ttgttcgagc 180
aacaccggaa gaatgcgatt gtcttcgct ttggcagtgt atgacttagtg gccaaagacga 240
ctgttctcaa cttgaacgtg aactgaggct ctgtatggaa cgaaacaaga agcgttctgc 300
tcaagtgttag ataagtgttt tcaataaata caagttgttt tct 343

<210> 4581
<211> 330
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-E3
<400> 4581

acgcgtccag atcatatatccc cttttgttt gtttatcggtt tgtcaaagtt tggttgtttt 60
cttggtagca gttgtacatt caacatcatc aaatgccaaa aggaagaag aaagattctt 120
caaagaaaga agccacaagt aaacctgcag cagcagatgc tacaaagacg acagaaaagt 180
ctggtcggaa agccaagttg aaggaaactg gtgcaaagaa acaataaaaaa gttgactatg 240

catgtgcagt cctgttatgt tttgtgagtt ctgtttgata gtttccagct attctttgg 300
tagtgaataa agagaaaatt ttttatattt 330

<210> 4582
<211> 433
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-E6

<400> 4582

ccgggtcgac ccaagcgtcc acccacgcgt ccgaaccaat aaatcaatgt cgtcttggtg 60
aaagccttcc acgccaatgg aatattaaaa gtggcgactt tatcaaggga acatcaaaca 120
acagcaacaa caacaacatc aacattcgct accacaacta gagaataata aaccaagtca 180
actgggtagt atttcggtat aaacgagaga aaatattatt cccacgggca accttgctct 240
agactggaca acactttcg 120 acaacttgtc attgttgtct catcaccctt caaaaactac 300
gagtaattaa acaacagagg aacagacggt tgatattgga agatcaaacc aacatcaaca 360
tcaacaaccc 120 tataccacac cgatggaaca tttgactgtg ccactagaca ttactttgaa 420
aaacgcccattc aag 433

<210> 4583
<211> 257
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-E7

<400> 4583

agatttgcg gattgacttg aaaaagagga agaatggaa agttcacgg ttctcttgct 60
cgtgctggta aagtacgagg tcaaacacaa aaggtccga aacaagaaaa gaagaagcgt 120
ccaaagggga gggcttggca aagactcaag tacaataggc gtttgtgag tgggtttgtt 180
ggttttggta agagaagagg tcccaacgcc aactcgtgaa gcgactgcaa tgataaagac 240
aataactttac agcgttt 257

<210> 4584
<211> 433
<212> DNA

<213> Cyanidium caldarium
<223> Clone ID: LIB190-041-Q1-E1-F11
<400> 4584

ccgacgcgtc cgaccacgca tccggagaga atgctgggtg gagtagcgaa acacgagaag 60
ggaagtaaaa ggttaagaaag aggaaaggtt tacgagagaa tgaagttagaa agaagagagt 120
gtaaggcggc gtcataatag aaatccgaaa ggagttagaa aaaagagaga gaagaaagaa 180
aagaagagaa aagccgtact gaagaccgac acaggtactc gaggagaaag gagacccaaa 240
ttaaggtag agaatggacg ataaggaact aagcaaaagg atatggtac tgcgttagaa 300
catatgaaag aagcagcacc gactgtttag caaaaacaca gcactctgca gaaaagagaa 360
aatgtaaagt atacagtgtg cggcctgcca aatagtagag aagaaatcga taaaagtgaa 420
agcgagtaaa aga 433

<210> 4585
<211> 459
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-041-Q1-E1-F2
<400> 4585

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tagaggacaa catgacgagg acgcctcgcc attcatataa ataaactatt tctgcaccaa 120
aagaatagtt aaggatctan gccacaaatt aacaggtaa ggtatgtgc agaaccgttc 180
aagtgcgaat tcgaggctt agggctatcc ttatTTGGA tagagcttgg ttctcgctcc 240
acatcaaaat tccaaacgat agtaaaaaca aatagttgg catccgttg aatcttcaa 300
tacccctatc ttatcattgt aatgaaggat tttgagttgt ttactgggg tggaaagatca 360
gaaggaagaa tggTTTCTAC gacagaagaa tatcgcatgg attaactaca agtgaagatg 420
attggaaact ctTTTgaaac gctatgacag angatatac 459

<210> 4586
<211> 427
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-041-Q1-E1-F3

<400> 4586

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gttccggta atgacgggaa agctggagaa tgcaaatttt taagcgttca ttgcacgttt 120
aagacgagat aaaggctan gtccctaaat gtggcatata gaggttaagtg cagaattggg 180
atactgcgtt ccgtgagaca gtggaggaag ctggagttatc tggaaagatt cgttgcaact 240
tggcaagtg gataagctcg aatgatcaaa cattgattat gtacttgctt ttagtagatc 300
aagaactgac acagaatgtt accatatggg aagagaggaa tgagcgacct cggagatgg 360
taacgtgtga cgaagcatcg aagactattt tgcattcttga gagtggattt cgaatgcctg 420
agctatt 427

<210> 4587
<211> 305
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-041-Q1-E1-F4

<400> 4587

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acagaanatg agagaatgga aagtttaat ggttcattcg aagtttaaac cgaaaatatg 120
gttgggtccc aaacgtaaca tggcggcgt acaaaaggat taagacttat gtctgccgtc 180
atgcaatgtt agaacccttc ttaactgtca ccaattttt tttcactgtt cacttggttt 240
aaaacgtcgtt gattggaaa aacctagggt ttgccaata atacccttg aactgaatgc 300
ccctt 305

<210> 4588
<211> 428
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-F5

<400> 4588

cggtagaa ttccggcc gaccaagcg tccagtggca tagagaaaaa agaaaagaat 60
tggatgctg cctccgtga aacagtggag gaagctgggg tatctggaaa gattcttgc 120
aagttggca agtggaaagg ctcgaatgat caaaagttga tcatgtactt gctattagta 180
gaacaagaac tgacaaagaa tgacaccaga tgaaagaga ggaatgagcg acctcggaga 240
tggtaacgt ttgacgaagc agagaagact atttgcaag tggagagtgg tattcgaagg 300
cctgagctat tagaaatgct tttattagcg aaagcaagaa tattgacttt ggacactact 360
ccagagtctt attccacaga cttttcctt gaagaggaga ataacgaaaa ggaattttaa 420
cgttgtt 428

<210> 4589
<211> 453
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-F6

<400> 4589

ccgggtcgac ccaagcgtcc aataatattt gcatttttt ggactttgga tttgcacgtg 60
tgggtgtgct cagtcagaac tgcttcttag ttagttacgc aatatgccta gtcataagga 120
acaaagtaca ggaattaaaa tatcagctga cggttacgca ctaaagttga gcggatttcg 180
gttggacgta gacggcagtt tggtcactat ggtggacgca gacgacctca gagccctcat 240
tttacggaa agcctaagg aaaagtcaa gctgcattac ccaaaatttt tcaaaagcta 300
ttatgaggag aataaggact acttttatta tatgactcat acggagaaga aaatgtatct 360
ttctctggaa gttgcacgag aatacgctac tctggggaa aactcgttc tgcagaaata 420
tttggacaaa gtcattgagc acgaacacgc ata 453

<210> 4590
<211> 429
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-F7

<400> 4590

tccccggtcg acccacaacg tccacccacg cgtccggcg tttggctatt ttttacacac 60

acacacacat atatatatat atatatatat cgttattgcc atcttgctgc cgatggcttc 120
tcgtcgagat tggaaagata tagctggagc cggttcttct tgtttcttgt ccttttagc 180
acgtatttta ctatttctg ttgcccagtt gggttggag tttttcggtt caacgccttg 240
gagaacaata ttggaaggac cgttgtgttgc tctttcaat tcattcggtt tggttggctt 300
tgaaaaacttg gaaaattgtt tggtttcaa acaaataccg gtttatccaa aattggtaaa 360
atttttggaa ccaattttgg gtttggact tacaatacac ccgtttttc caacaacttg 420
ttggtaatt 429

<210> 4591

<211> 446

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-041-Q1-E1-F8

<400> 4591

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ctcttggaga gtccgaatttgcgttggcagt gaaaaatatc gactatgaat acaaggctat 120
caacttggta aagaacggag gtgagcagt gggatcggag tatgagagac tcaacccaag 180
tcacactgttgcgttgg acgttggacgg tcataactatt ggtcagtcag ttgccattat 240
ggagtacttg gaagagaccc gcccacaagt gcccttggta ccaaaggacc cggctcagcg 300
agcaaaagtt cgtcaggttag tagaaacagt aaatgcggat acacaaccac tgcaaaattt 360
gagggttctg cagtgggtac agaaggaggc angggaggaa aagagaaaacg cgtggctaca 420
acatTTTctg acgctcaata tacaag 446

<210> 4592

<211> 423

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-F9

<400> 4592

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cttccgcttg gatgctactt cagttggaga tgaacgtgga tttgcaccca acattcatga 120
attggaggaa ggagtggagt tggtggtaga agccattgag aaggcatgac atactggtaa 180
agttaagatt ggcatcgact ctgctgcttc agagtttgg aagtctgagc gttccagtt 240
cgatttggac tttaagaatc ctagttcttc agatgctcat ctcaagtcca ctgaacaatt 300
attgaattta tatgaagact tggcaaagaa gtttcctatt gtttccttg aagatccttt 360
ccatgaagaa gactttgatg gctttgaaa gatgacaaaa gtgttggaa aggactatca 420
aat 423

<210> 4593
<211> 448
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-041-Q1-E1-G1

<400> 4593

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cgtccgcca cgctccggt caccttttt aataaaactt gcatggctca aacttcacta 120
ngaggagcac aaaccttgcac tacgacagat tcacatctaaat ctacagaaaa tatgtcgtcc 180
aagtgaaggc ttttcccatt cctttccact tgagcggttt ctttatctga ctgagagttc 240
ccagcanatg atttggaaaa ggataaaagtt gtggacaacg gaacaaccgt ctttgtatct 300
gccgccccgt a ctgcacgttt gtcggatga ccagactcgg aaaatatatt gcggagatgt 360
tcctttcctc caaacagtcc aaagtgcacg tcgttcttc gttgctctgt gaaagaattc 420
ttgacgttac gatcgttcct actcaaag 448

<210> 4594
<211> 452
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-G2

<400> 4594

ggtcgaccga cgctccgaa tggtaaatt aagtattggg attagtgagg caaatccaac 60
tgaacaacta aatattttct ggtttgaaga tgtggaaaca tttagaacct gtcgatatca 120

taagaccagg cacttggcaa tgccaatgca catcttcgg ctcccttcgg cctttgcaa 180
aaagagtatt cgcgatggaa tatcttcca cttctcgctg aaaagttgct cggattctc 240
tggtaaaagg tccaaaacc tgaatttctt caactcgaga gacacaagtc agtgatgggc 300
ttttaaagg tgaccgttcg ttgccactat ggaacccttg tgaaactgaa actttgcaac 360
tggactcgta gattgctcct tagtacaaga aagaattcgc aaatccgaa ctggaaatac 420
ttcctcgta tcaccagaca ctaataaatg ac 452

<210> 4595
<211> 408
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-G3

<400> 4595

attcacgggt cgacgcacgc gtccgattca cagtttcct ctccgcttg ttcatgttga 60
acacgagttat cgcactaaca gttggaaaga atccttggct tttatgggtt ggcctattat 120
caacgatggg acccttaatg ccctcaattt ttacaagaat cagtatccca caaatatgtt 180
cctgttgggg gtcttacgt ttggagagtc tttatggta gcaactattt gttctctgtt 240
tcgttcagct ggacttggcg tcatcggtt tgacgcctt ctacttactt ctttgttatt 300
cacaggtctc actgcttatt gttctacag taagaaggat ttctcggtcc ttggaggctt 360
tttatgggtt ggattgctct gtctgttcgg tgctgcaatg ataaatat 408

<210> 4596
<211> 406
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-G4

<400> 4596

ggtcgaccga cgcgccgag gacgagttggg cggacgcgtg ggtggctagt ggctccaaga 60
gcaccaagtc caacgaaaaa gtccaaatca cattagaaca agatgaagag tttcgcaag 120
cttttacgtt attcgacaca gacggggatg gtaatatgag taaaggaact cggtaacggtg 180
gtccgttcct tgggtcagag tcctacggaa gcagagttga aagaaatgat agcagaagtt 240

gacaaggatg gaaacggcac catcgacttt caagagttc tcgacttgat gtccaggcat 300
atgagacaag cagatacaga cgaagagata cgtgaagcgt tcaaagttt cgataaggat 360
ggaaacggtt atatttctgc cgcaagagctg cgtcatgtta tgacca 406

<210> 4597
<211> 373
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-G5

<400> 4597

ggtctggaat tcccggttg atcgacacgt caaggcaagc cacgctttat acgtctcggt 60
ttatagaaaa agacctttt attgggttagg cttctaagca gccatgtaat aatgctgtct 120
tccgcacatg gcattgtagt atttgcacta actcgaactt acgtcagatt tccggttcac 180
acatggtcgc cagtagcaga acagctggag gtgacacact tttggtaag taggcacaca 240
agcaaatgga atctgaatcg aagacacagg gggagtctac gaaaccttgt agtgtttgt 300
taattatcta cggcagcctc ataatgcaat tcgtacatga gtacgttatt aagagtcaat 360
ccaggaatga ctc 373

<210> 4598
<211> 415
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-G6

<400> 4598

ccgggtcgac ccaagcgtcc acgcggaaat acagcgaaga gtcgtcgcgt accgagtcga 60
gtatacgaaa gatgacgacg acaggtggta agaaagcgta gcagcgattt gttcgtgtat 120
acaaaacttt ttacgcgaca ctaggaagaa aacgtactcg aaatgtggaa gacgactagg 180
ggatggacaa agatatacat atatatctat atatatgttag acatgtgttt attggatgg 240
ttgttttgg tgtctatattt taatctgtct ttatagagcg ataaagaata cgaaccaacg 300
tcaaactaaa aaaaaaacat aaaatgaata cataaataaa aatcaatcca gaaaaaacat 360
caaaaaaaaaa cctataggtt atgtacacaa gtgaaaaggg gcggacgctc tacag 415

<210> 4599
<211> 454
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-G7

<400> 4599

tcccggtcg acccaaacgt ccaccacgc gtccgcacatcg ttagtgcgaa taatgtgtct 60
gcagtgaaac gaagtgcgt agagtcttat ggtggatag ttgtttatg tgaaccaaat 120
ctaccagctc gggaaatctac tgcagaaaaa gttgttcggg aaactggggg agaatacata 180
cctccataca atcacgtaga tattattgca ggccaagcaa cggtgcagc agaactattg 240
gagcaagttc ctgattttaga tgccattatt gctcctatcg gcgggtggagg actcgtgtct 300
ggcacgtgta ttgccgcaaa gcattttct tcccgttgta aggtttggc agcagaacct 360
gcaggtgcgg atgatgcgaa gcggtccttg gaaagtggtg tccttattcc acagacaaac 420
cctaaaacta ttgccgatgg acttttaaca agtt 454

<210> 4600
<211> 435
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-G9

<400> 4600

ggtcgacgga cgcgtccgac cacgcacccg cccacgcgtc cgcccaacgac tccgatgttg 60
agctggctac aaaaaaacca cttgctagtt gcaatattac aagtgtcaag aatgtttact 120
ctttatcgag tcacagtgcg tctttcccc taatcttct tttcggtgt cgacgacgtc 180
gaactaccta aaacgcaaaag cagcaaagtc ccaaagttc gactctttt gtttctccca 240
ctagccatat tgaaccaaag tgtttgac cacttgccac gacaacgatt ggttcactct 300
cgtgtgtttt atcttgacaa aactcgaaga ctatattt ctgttatgt tttagaggtt 360
tttcttagagt gtgttttgg agttgttgta cttccagtc tggtggttgg tgaatggttc 420
tagtgcacaaa gagaa 435

<210> 4601
<211> 462
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-H1

<400> 4601

cggtaagaa tttacgggtc gacgcacgac tccgagtgc tattgttagtt tttgtccagc 60
ggatgccttggagggaaaat gtcctttggg aaggaaggac tgtttatataa ggagaagagc 120
tgaaattctt tgcaataatc ggaaatcttt tcgttagtaga ttatcaagtgc tgcgtatgtcc 180
ttgcactatc gatgactatc agtgcgatat tggttatgaa agaaaacctg gttccacgga 240
atgtcatcct tcctatggta ccaacgattt ttctagtcac tgtggacatt tgaaagcaa 300
aggctacgta cttattccag gtgatacatg cgatgctaca aagggtctca atctactgcc 360
tagtcgttca agttgcatttgc catattggat ccgacgtatt gtatacatcc tattttggat 420
attaagtattt ccaatgttta tgtttctat gatgttgttac 462

<210> 4602
<211> 445
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-A10

<400> 4602

tcccgggtcg acccacacgt ccgcttggag acgtgagata tcttgttggc agcaattgca 60
atccattttc gatatgctca attctactgt ctgtactcc tccgagtgcgt cattgttcca 120
tgagggaaaat tgtagatgtag aagctttgtt atttcttttgc ttatgcgtt ttatcgtcc 180
tgaatgtgcg atatctgaag tgtatttaca agagttgatg aggaaatatc ttgttctga 240
agtcatgatc gttcgtgcta tcgttcaaag aattgtccat ctatgtatcc aattgtccaa 300
acatagagaa gaggagaaaat ggagaagcat tggtcgtcat ttgtttctg acgagtcatt 360
tgtagagtcg ctattgaaaaa cgatgtgtca ggattcatcc ttatgacc ccaatgagca 420
acaacaatca tctgcgagta ctttc 445

<210> 4603
<211> 334

<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-042-Q1-E1-A11
<400> 4603

cgggtcgacc caagcgtccg accacgcac cgcttgcgtc ggcaatgtcg tctacttatt 60
aagattcaga atacgcaaata attcagctca atatctatcc cacatgagat atgataatcg 120
gtggtgatta caggcaagtt gccattaata tatccccat gcagcctta caaccattt 180
cttagaatac tatgcaaaat attgtccatc gaatactgat tcgaagtgtt ctgtacagag 240
atgagtgtgc cactttggat ggtttggaa ggataccatc ttatatatat actcatatat 300
gtatacatac atgttagatta ggaaggtagt gatc 334

<210> 4604
<211> 334
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-042-Q1-E1-A12
<400> 4604

tcccgggtcg acccaaacgt ccaattataa cagatgaaaa tagcgcagca tatttcaacc 60
aactaaattt cagttttaga ttgcaaccag ccacgactaa ttatgtgcta atttataaaag 120
acaacgttca cataaaaaaaaaaaaaaa aaaaaacaaa aaaaaaaaaaaa aaaaaaaaaaaa 180
aaaaaaaaaaa aaaataaaaaa aaaagaaaaa aaggggagta gagcaagagg ttagtaaggt 240
acagaaaaatg agcatggtac gtcaaaatcg ttttagaaaaa atggcataaca cacaattaag 300
ttggacgtct ttttacacag tcgtgaatgg gaaa 334

<210> 4605
<211> 446
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-042-Q1-E1-A2
<400> 4605

ggtctagaat tcacgggtcg acgcacgcgt ccgaccacgc gtccgtcatt ttgtttccca 60
tagcaacgaa cctgtatttc gtgtatttca caagtgcac atgtgctgct ttttagaaca 120

aagaatagtt gtcttcggg atggccttg tatactgaaa aattccaaca gctgggttgc 180
gttggatgct ttgcgtata tcacaaaaca tgaaaaggac aaagaaaacc cgttcttcta 240
tttcttcgcg gttgtgagg cgttgatgaa tttatggcga caacggatga acggcacgtt 300
ggctggttca tcaccaccga gaaatgtatt tgcttgact tggcaacgag aacagtctct 360
ttcccatgca caacagttgc gactcgagtt gaacgagttt tgtcgaggaa tatctttcc 420
tttcatgaaa agatggaaaa tgcat 446

<210> 4606
<211> 465
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-A4

<400> 4606

gtacggtcca gaattcacgg gtcgacgcac gcgtccgagg tgaagcaagg agaggcagag 60
ataaccctcg aagaaggact ccctcacgag actgtgacat cttcacaaga gacaaaagat 120
gaaggcccgg aaacaaagcc aaaccgctt gcaattactg gccacacaga ggaggaaatg 180
gatacagagc taagcaagct ttagtgcgag aacaaccggc tgcacaagaa aagattactt 240
acttccacgg tctttggtaa ccctaaacat tttatatggg tcctgcac tttgcgagc 300
atgggaggaa ttctgtatgg tattgaccag tctttgataa gtggtgctgg tatttatatg 360
ccagttgacc tacacattga ccagaataga gaagacatgg ttactggatt tatgccactc 420
ggtggagtat ttggtgctt aatggatgg ccaatcaacg aactg 465

<210> 4607
<211> 436
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-B1

<400> 4607

aattcacggg tcgacgcacg cgtccgacca cgagtccgct cttccttata ttctttgtgc 60
ttggacaatg gttgcaaaga ctgctctgag ttgcctctt ctctcttcc ttatcgctgc 120
cgcagttgca gccgacgtag tttcagagga gagatgggaa tatgctcagc aaacccaaca 180

| | |
|---|-----|
| acagcaacag tgccaacaag tatgtaaaca gtagtcatac tatcagagtc cagtctgcac | 240 |
| ttccgttaacc acacagagcc catactggac ccaatgctcg aagactgtgc aaaccttgc | 300 |
| cccaagccag tgcagtactt atacccaatc tcctacatgg acctattgca gcacctacac | 360 |
| caccactagc gtaccatccc aatgcagcaa gggcgtgact acctatactc aaacctgctg | 420 |
| tqcttatgcc caacaa | 436 |

<210> 4608
<211> 441
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-B10

<400> 4608

| | |
|---|-----|
| attcccggt cgaccacac gtccgttcac ttggctta cttgacttgc gactgaagga | 60 |
| aatggaaagt acgaagaaag ctgccacggt tagatatggt tctccaaag gcaacggttc | 120 |
| ggtgggacga agtcatgttc acaagtcaaa gagaaaccac ttgaaaaaca aacttggtag | 180 |
| cttgaaaaat gaacaaagtc aaatatgcaa agcagattat tggaacttgt tactgttgg | 240 |
| ccttttagct ttcaccacaa gattctggcg tttgtttac cctgctgctg ttgtatttga | 300 |
| ttagttcac ttggaaagt ttgtcacttg gtacttcaaa catcagtatt atttcgacat | 360 |
| acaccctcct ttaggaaagt taatactata tcttggtggt ttgttaggtg gatataatcc | 420 |
| tggtttttg tatgatgcta t | 441 |

<210> 4609
<211> 455
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-B2

<400> 4609

ccggtaaga attcacgggt cgacgcacgc gtccgagtga aacgtgaggg tagttcatca 60
tggttgagac aaaacttcaa gatggtgtta gtgcttctct ttggactgtt cgtctcttcc 120
tctacacagt tatttagca ttctctgcca ctatcattgg cttggatgga cgtaaagcag 180
acaacatatg gaacgacacgc ttattctatg atggaaagta cattaacttt tgtgcttatt 240

ctgcctttc tggtagaa ggagggacc atggacgtg taaatatgtc atggcggttgg 300
cgtctataag ttgttattcta gtcttttct tgtggcttt tacatttgta gatgcgttgt 360
atccatttct taccaagttt tggttattt aattgggtat caacgtgtt caaacaatgt 420
ggtggttggt tggagcaatt gttgtatctg caaaa 455

<210> 4610
<211> 431
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-B3

<400> 4610

attcacgggt cgacgcacgc gtccgaccac gcgtccgccc acgcgtccgc ccacgcgtcc 60
gcccacgcgt ccggaagtaa atagacgttt gaaaggcgtc cagtatgaaa ggagaaacga 120
gtgttagcact gtctagtcgt ccaactcagc gaaacagcaa taacttgaa aatgcagtaa 180
actagcagta ggacggaaag accccataat tcttgactag ataggttag ggaggagaga 240
gaatcatgaa gtagaggagg tgggttaaga gatgaaagac cactgcatga ggataaggaa 300
tctaactgag taaggaaaat aagcttaagc tagttggct gggaaagtaa agcctaagaa 360
agagtaaatt aggcaagcaa aggcatgaga gaagtataat agcagaagca tgcttgaaga 420
aaaagaaaga g 431

<210> 4611
<211> 451
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-042-Q1-E1-B4

<400> 4611

ggccccagaa ttcacgggtc gacgcacgcg tccgaccacg cgtccgcctt ggtaccagta 60
tggcgctggc tattcacttc aaaatgaagt cgaaaaaaga ctttcgacg ctttctttg 120
acggcgactt tctcaaagtt tcagacctca agctgttagt ggtagaaaag cgcaagctaa 180
attatgggaa tgggttgat ttggatca cagatgcgca gaccaatgag gaatatgcgg 240

atgagtcac gttgattccg aagaacactt ctgttagtgat aaagaggta ccagggcaa 300
agccgggggg tattcttcg caacaaacgt tggcgcgca gaaacgaaagg taatcgaga 360
acgatttggc gaagatcanc aacaacaaca actcgacgag tgtggaaagc tcgtctggag 420
actaaaccaa gcatggtgga aataatatca g 451

<210> 4612
<211> 450
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-042-Q1-E1-B7

<400> 4612

ccgggtcgac ccacacgtcc gcccacgcgt ccgggttgatg aaacaacttt tccacgatga 60
tatgtttcga gttggcctgg taaaagacgt tgcaaggagtt caagtttgtg gtgctctaaa 120
aaatgtgatt gctttgggtg caggctttg tgatgctta gaaatggaa acaataccaa 180
atcggctctg atgagaattt gactgattga aatgcaacgg tttacaaaga aatattattc 240
taatgtgaag ttggaaacgt ttatggaaag ttgtggagtt gccgatttga ttactacttg 300
ttatggtgga aggaacagga aatgcgcaga agccttgta agaaccaaga agtcttgaa 360
agagcttgaa gaagaattac tcggggaca aaagctgcaa gggacgacta ctgccanaga 420
cgtttatttg actttaaaga aagacaacgt 450

<210> 4613
<211> 267
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-B8

<400> 4613

acccacacgt ccaaccacgc gtccgggtga tgatgcgtt tttcctggat gatatgttc 60
cagttggcct gttaaaggac gttgcgtgatg ttcacgtttg tggtgctcta gcataatgtgg 120
ttgcgttggg tgtcagctt tgtgatgcgt tacacgttgg aaactgtact aagtcgggtc 180
tgatgagaat tgtgctgatt gagatgctcc ggtttacagc taattattac tctaattgtgt 240
cattggaaac gtttatgcca ggttgtt 267

<210> 4614
<211> 158
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-C1

<400> 4614

aatcacgggt cgacgcacgc gtccgaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
aaaaaaaaaa aaaagggagg acgcacaaaa agataaaaag gttaaataca cgtggaggcg 120
acctcaaagg tcttctagaa tgtcacctaa attcactt 158

<210> 4615
<211> 402
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-C11

<400> 4615

tcccggtcg acccacacgt ccaatggttg gaactgttgg tgctggtaga attggttacc 60
gagtgctgca gagactaaag ccatttaagt gtaaagaatt gctatattcg ggttatcaag 120
ctctttctcc cgaaatggaa agcggagttg gagcgaaacg cgtaactttt gaggagttga 180
ttgaacgctg cgatgtgatc actagcaatt gtccatca tgacaaaaca aggaatctct 240
tcaacaaaca agtatttgat aaagtgaagc ctggtgtaa cattgtcaat actgcaagag 300
gcgctagtgt agatcgagat gcgttggtag aagctgtgaa aagtggcaa gtaagaggat 360
atgcgggaga tgggttat ctcagccag cgcctaaaga tt 402

<210> 4616
<211> 365
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-C12

<400> 4616

ccgggtcgac ccaaacgtcc gaccacgcgt ccgcacgcgt gtcggtaaa ctagaatacg 60
aagtacaacg aggaaatgaa cgaaagttat ggcaaaaaca gctaccatca gcatcggtag 120

cacgtgcgca ccaagctgta gagcagaata actgggtgta aaggtcagta gtagagatgt 180
gtgaaaggta aaagataggc gagatcgatg atccgcatca agtgcagaga tcgctacaca 240
tcagcaagaa agaatataaa ggaagagaca ctagatgagg agatagtgc tacgacgtga 300
agcggaaatag gaaatcgtgt agtctatgca ataaactgtg gaatgtgtca gagtaagagg 360
agtca 365

<210> 4617
<211> 395
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-C7
<400> 4617

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gtggagagga aaacgcgagg tcattggata tactttggaa gcagctttac agaaaaacttg 120
tattgtggaa aaccagttga ggaaatggaa aaagaaaactc gatagtctag cagacaatta 180
ttcggtgggt acgagagcct atgatgcgag aatgtggtca ttggacctca tcgcaactat 240
tatgagtgtc tgccccatc tttttggaaat gttttcacaa ttctttggtt aatatgtcca 300
attgccatt tacaatatgg gaaatgcgag tcagtattac ttttatggcg tgatggagg 360
tattccgtc ggccgtcgta tcagcgtcta tttct 395

<210> 4618
<211> 296
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-C8
<400> 4618

tcccggtcg acccacacgt ccaaaagatc ggagcagaca gtaaaatgaag ttaggaaaca 60
tatgaaatga cgccaggattca aggcccgtgt attcaattta gtagcagcat ttacagaata 120
cttgttattgg gagtcattcg atcaggaaat tgaaagcgca acacggaaac ccagcacact 180
tgtctgcaat cggttaagagg ggtgaatgac gcttagttaat cgccattaga cctcaaccct 240
tacatcacca gtatcgggtt gcacgggtgt cgaatgatct tactgttcag tgacaa 296

<210> 4619
<211> 388
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-D1

<400> 4619

attcacgggt cgacgcacgc gtccgaccac gcgtccgccc acgcgtccgg tttCCAATA 60
aagacgacaa cggagggtgca atgcccattt attgggttgg aatccaagcg tcgtattctg 120
ccaacgtaca aaggataagc gtccatagca actatatatg gcacttgcag ctacaatgt 180
tgcaatgttag tgaaaaaacc ggggtggattt cagtcgatcc tttgcaggaa acgacaagag 240
tgaaaagtgg gatttgtcac gtattgttcc actgtcgact atgtaaaaga caaggtacgg 300
tgacattgtt ggatgaacct caccaatatg acaagaatga agagttcaa aagtttgcga 360
gttttgattt tcgaggactc gagccaat 388

<210> 4620
<211> 409
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-D10

<400> 4620

ttccccgggtc gacccacacg tccgaccacg cgtccgccc cgcgtccgtt gggcacgagt 60
tgacgattta acgaaggccat gcctcccaag gcacccctt acaagataaa aggagttatc 120
gaatactttt tttcaccgaa tgaacagaag ctattttagt acttgacgga tataaaactt 180
ctgacgacga aagctagaag aaagggtggcg gataatctcc cttccatgct ccccggtatt 240
ctactgtttt gtgggtgtta ctttgggtggc tattatgtgc atgagcagag gatcaagagt 300
gctcggtggt aggcgctcggt tgggtgtttt gtgtgttgtt gtgtatgaaa caatgacatg 360
aaaaccatgc ttatctaa aaaacacgtg gatgccacat gtttagattt 409

<210> 4621
<211> 369
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-D12

<400> 4621

ccgggtcgac ccacaacgac cgaccacgac tccggaaaga cgcagatatt gAACCTCATT 60
cctgtagaag acagatccga ctacctgtgt gccatggcaa gttaaggag tagatcacga 120
aaccacgctg aaggcaatcc tagtgagaga atgagtcatg tgaatgacat cacgaccgct 180
agtatcaag cacagtgtca cagtcatac ctagggcaca ctgtctcaac gactgaacca 240
ggagacgtcg aacatccagc aggtcagctc tctcgctacg atcgaaacgc aactccactt 300
ctaagcaatc tgattctcct ccaacagcgt taccgctcat ccgttcaagc gatatcctag 360
aagtacgtc 369

<210> 4622

<211> 406

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-D2

<400> 4622

cgtccagaa ttacccgggt cgacgcacgc gtccgaacgc aaatacggga aagcagtagg 60
agaacaaaga gaaacgacaa cactgagtt caggacaaat agagggagta gatgaagaca 120
gcaagatcag cgaactatga gtagggaaag agtacagtgc atcgaaacat gacactagct 180
gcagaagaga gtgtaaagcg cgtaccttt gcagaatgtc ccagccagtg caatacgaag 240
cacgacgaaa gatgaaagaa gtagccatgt cagacccgaa gccacttgat cctatgtgt 300
ccacgcgata taatgctgaa ccagtatctg tggcaacaga tttggaagag atggcataat 360
gagtgaaatg ccaatcatga ctagtgataa ctcgtactcc tcgaaa 406

<210> 4623

<211> 416

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-D4

<400> 4623

gtccagaatt cacgggtcgac cgcacgcgtc cgaccacgac tccgcccacg cgtccgattt 60

tctgcctgcg ggtgtgtgt tctgtgtgtg tgtgtggttg tggttattgg gatgtcagac 120
tctgcaacac ctaccaaacc tttgatttgt aagaaagctg ttgtaactgg aggaaacaag 180
ggtattggag aagctatac tcttgctcta gcagaaaaag gagcggatat agcaattatt 240
gctcgagata cggattcagc tcaaaaacgtg atcaagaaag tgcgttcaga gagacgttc 300
tgtaaggttt accccgcgga tctcaatgac tctgcttgt tgaggaaagc agcaaaggag 360
atactggagg atatggggag agtagatatt cttagtcaata atgcgggtat gtctca 416

<210> 4624

<211> 441

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-D7

<400> 4624

ccgggtcgac ccaaacgtcc gactcaacga cgtaatgaga ctcactcatt ttctctttgt 60
tttgtctttt gtagctgttt tcctcgtagc tcatgcagtt cccgttggag aagatgcatt 120
cagtttcagt cagactttt gaaatgcctc tgcttcaggc aacgcctctg ttattccagc 180
tacaaccaag atccccaaat tagaagtaac tagtagtgcc tcatcaaagg acaatggaaa 240
agcagctcaa gtagactttt cagattactc aaagggatat ctttcgccta gctattttta 300
cgctccttct tacacatcct atgtggatt tcctcaatat ccattccatc catcatggcc 360
ttcttttaat gagcagcctg ctttgggtgg ctgcgatccc aatgcagagt ttggagagtc 420
tgaaattttc gtgtgatggg a 441

<210> 4625

<211> 435

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-D9

<400> 4625

gggtcgaccc aaacgtccga ctgcctgtat cttaacagga tggattggcg aatcagaaaa 60
tagtttgcga aaaaatgttc gtgtctcact ccgtacctgc aagaaactta ccggctttgg 120
cacgttaactt ttccaatgtc tgcgttcaga ggagtggctc gagagggggga tgtttacgaa 180

atgtgaaagt tttcaaccac aaacgacctg caaggttgg atctacgaaa atgagaggag 240
gcgaccatga aaggagagaa cttagtcgtc ctatgcgtac gcttgattcc gctttcgatg 300
aacttttagc ttttgcgcaa gatccctggt ccatgtttcg ctctccatgg agtctgtcgc 360
ccagaagtat ggcagtagac acgtggatgc ctcgtgttga cttgggtggat aaggaagatg 420
gcttttatgc atacg 435

<210> 4626
<211> 125
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-E1

<400> 4626

tttttttttt tttttttttt taaatggaag caacccaact ttattattca aagtcattac 60
accgcggaaa gctccatcga taagcatcta taagtccgtt cgaggagcat ttttcgcat 120
ccagt 125

<210> 4627
<211> 372
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-E10

<400> 4627

tccgggtcga cccacacgtc cgaatttacg gaggttgga ttaaacacat cattggctgt 60
ggctcgaagc caagtttagag acaatttagag ggaagcagtt ttgttatgag tcttctttt 120
tgctacacta caagaacatg ggtgaaaaca gaagtgtAAC gtccgaaagg tcaaacgaaa 180
agcagataaa tgcgttgaat gaaacacgaa aacagcatat ggccagaaga gctttggga 240
aggcatttcg aatttacaac atagcaatcg agttgggccc gaacaatgcc ttattgtaca 300
gtaaccgctc cgctgcctac ttcaacttga gaaatttga agcggccttg gaagatgctc 360
taaaaaggcgt tc 372

<210> 4628
<211> 457

<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-042-Q1-E1-E3
<400> 4628

ggtccagaat ttacgggtcg acgcacgcgt ccgacacgga ttaaatcgac attattattc 60
tctggcagtg gcttatcgta agaacgagct ggaggaacaa atgttgctca atttgcataa 120
gaaacactgg agcagaggct taaaagtgac agactttgaa gagcgagctg agaaaaatga 180
aaaggcagtt cagtccatgt tggagttggc aaagagttat agcaaaatgt tggaagaaga 240
acgtcaaatg acaaaggaac aggctgcaat tgcaaatgtt ggcaaagttag acgcaaagaa 300
acggttggag caggatgtga cggagttgat gagtaagaat attgatcagt gtttaagttc 360
catgttagat tctgttgtt tccaacaagc ttgaccttca acagttgttag tgtcctttaa 420
atagcggttt ggttagtgtgt cctaattgtaa agaatgt 457

<210> 4629
<211> 430
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-042-Q1-E1-E7
<400> 4629

ggtctagaat tccccgggtcg acccacacgt ccaatcgtaa gtttcatccg gccaaagcgac 60
tagcatcgac gaggatcgatc agaagagtagt gtgcaaggaa aaccaggaag agtaccggaa 120
ccaatgtggc gacgacaaca tcgagtcattt cgaaaaagga agaaaaaaaga caacaactgg 180
caatgatggc tgaaccacga aaattgcgcgat gtcgagatgc catcaagcgcc ccatcgagaa 240
tgacgacgac gacgatgacg agtactacta ccgcaagcaa tagttgagaa tctccatcat 300
acatacacat agagagagag agagagatac gttcatcaca tgtgtgtgtaa tggtggcatt 360
tgtgctcgaa tagatatacg ctcgatagan aagtaaatga aatgagcagc aacacaactt 420
anaataaacac 430

<210> 4630
<211> 419
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-E9

<400> 4630

cccggtcga cccacacgta cgcaaatgcg gagtgactaa ctatggat tgctgcttac 60
aggaagctt ggaatggcgta ctcccaactc agaagatgac agcgttgga aagaaaatatt 120
ccactcattc accagcagat ggtcgcaaag gctaaaacgt cttccagagc ttccttcgta 180
tattagaagt ggtgctgcgt gggagtcggt gacaagaaag ttccatgact ggaaagaggc 240
agttgtggca aatccttatac ctgctgcagc ttatgtggtg actttggtg ttctgtatgg 300
gaggcttcta tggacaataa gagtgtaag aatagaagag gctaggatca gacgtacttt 360
tcaggaattt aaggatcgac aagctcgaga aaaagcaata caacagcttc gtgaacaaa 419

<210> 4631

<211> 373

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-F1

<400> 4631

cggcttagaa ttcacgggtc gacgcacgacg tccgagtgaa tcttcagctt tccatgtttc 60
aagttttgca aggtacaata gtatggat tatttcctt gattggtttcc ttgtttgtt 120
acttttttgtt tggtcaagtc caaaaaacta ttatggata gaaaggccgg tcgacgatgg 180
cgaaggaatg gatgtatgtt tggtgaagaa gagagagaga ggctttgtgc agatatttag 240
atggagtctg ttacaagaaa gaatattctg gaactagaag aaagattgg agatagttct 300
tcttctagtg acgaagaaac aaatactatt gggaaacgttc ccattgagtg gtataaagac 360
ttgtcacacg ttg 373

<210> 4632

<211> 383

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-F10

<400> 4632

ttcccggtc gacccaaacg tccgaccatg cgtccgcgag agaagaatcc atgactacac 60
taattaagta gaagatacga atgcgttcca caacaggatg aataaaatat gtctcgaaga 120
agccaaagac atggccagct atgttcatgt ctgttgtct cagatgcaga gccatttcg 180
aactatggaa gacactctac taggcagaat tgcaaatatg ggttagtcata tagtcgaact 240
ggagaagtcc atcgttgaga tgattgaaca gtctggagtg aaggatggcg cagtaataaa 300
gtctggtgta gttactacga gaagtcgtgg ggagtaattt cgtaagttgt agtacgttga 360
ctttctacca gcacatcgctcg tac 383

<210> 4633
<211> 443
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-F11

<400> 4633

attccccgggt cgacccacac gtccgaccac gcgtccgggg aattttgtcc gagagttgt 60
gtctccgtca tgtcttcctg tcctccagca gcttcgttct ttggtttatat tggtgctgca 120
agtgcccttg tattttcaaa tttgggtgca gcttatggta cagcaaagag tgggtttggc 180
gttgcttcga tgggtgttat gagaccggaa catgttatgc gatctataat tcctgttagta 240
atggctggtg tgcttaggtat ctacggtctc atcgttgctg ttagtttgt tggacaaatt 300
gccgaaacga actatccata tttcttggc tttgcacacc ttgcttctgg actagcaaac 360
ggtctcagcg gtctggcagc tggaaattgt attggtatac ttggcgacgc atgcgtccga 420
gctacatctc atcagccaaa act 443

<210> 4634
<211> 326
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-F12

<400> 4634

cctaaaggat ccacgcttac gtacgcatgc atgcaatgtc aggggcgtt ctacagtgt 60
atctaaggatc agttcacggg ccatcgattt caacgtcctc actggaaaaa ccttgggtgtt 120

acccaaggga attgccttgc aatagatccg cttgcacca gctggcgta taccaaataa 180
gtccgcacatcg atcacccttc ccaaccgttg ctggcctaa tggcaaatg ggacgcacct 240
attaccggcc caaaaagcgc cgcggttgta atggtaagc gcatcgtcac tgtcacagtt 300
gctaacgccc gacggccccgc accttt 326

<210> 4635
<211> 420
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-F2
<400> 4635

ggtagaat tcacgggtcg acgcacgcgt ccgaccacgc gtccggtcga tttggggcgg 60
tgctcgagtt gtgtttcag gaaaggctgg aactttgctc gttccacggg aatatggta 120
tggatatttc gttttatat tttacacttt catactgttt tggaaagaag tcaagggtgg 180
gcaggcacga aaacgtttca acgtaaagta tccgaccatg tatgagaaca aggaggacag 240
tcactttaac tgctaccaac gtgctcatca gaacactctg gagaagacac caacctttct 300
tggatatttc ttgttaggag gaatatatgc tccatatttc tggtcgatat gtggactgat 360
ttggtgcttt ggtcgattc agtatgttt gggattttac tcaggtgacc caaaaaagag 420

<210> 4636
<211> 411
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-F3
<400> 4636

ataacgggt cgacgcacgc gtccgacgac aattgtgcaa tttgaaaca accggtgacg 60
caggttcgac tcaccaacgt gattgtgtt cgtttacaga ataacgaaat acggttcgaa 120
atagcctgtt atagaaataa agtgcattct tggagaaatg ggacggaaaa ggatctggat 180
gaagtgcattc aagttagaaaa cgtgtttcc aacgtatcga aaggcatcgt agccaacata 240
aaggatttaa tggagtgttt ccaaacgacg gatattcga agatatgcgt cgagatactc 300
aacaaggggag agttgcaat ttccgacaag gagcgcaaca ccgtgtatga aagttgggt 360

cacgaaattc cgacaatagt agccaacaag tgtattgacc tggaaacaaa c 411

<210> 4637
<211> 408
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-F4

<400> 4637

gtcaagaatt cacgggtcg cgcacgcgtc cgggttgtat tcttggttagc agttgtacat 60
tcaacatcat caaatgccaa agggaggaaa gaaagattct tcaaagaaaag aagccacaag 120
taaacctgca gcagcagatg ctacaaagac gacagaaaag tctggccgg aagccaagtt 180
gaagggaact ggtgcaaaga aacaataaaa agttgactat gcatgtgcag tcctgttatg 240
ttttgtgagt tctgtttgat agtttccagc tattctttg gtatgtata aagagaaaat 300
tttttatatt taagaaaaatg tgcaaaattc cgaaaaaaga acgcaacacc agtgtatgaa 360
agtttggtgc acaaaattgc aaacaataat aacaaaaaaag ggcggccg 408

<210> 4638
<211> 458
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-F8

<400> 4638

ggtagtgcgttccgggtcg acccacacgt ccaccatcac ctcatccaga tcgttggAAC 60
ttgggtgaag tgtttattct tgcaacggca ctggctgg ggctcaactgc agcaactctc 120
atttacttta caactttgta caagacatct ttctggacag atactttcc tctgtacgca 180
gattggaaga atcccaagtt gctcgctata aggctccat acttcactta tggcctcaa 240
aatagttta tgctaaagtc tctcatctat ctgcaagtat ctatgattgg acaagctctt 300
atcttctgta cccgtgcata ctggatgttc tttatggatc gtcctggat cttattgtatg 360
ggtagtgcatttt gtactgcaca gactcttgct actttcttat ccgttatgc caactggggc 420
tttacaaata ttgaaggagt tggctgggc tggctgc 458

<210> 4639

<211> 361
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-G12

<400> 4639

cgggtcgacc caagcgtccg accacgcgtc cgcccacgctg tccgaaaaaa tcatcgcatg 60
agaaaagaaga ctgttagctgc tcataatgaaa gcagaacata aaaaggatcg caagttggca 120
acaagacgac aagagagcaa atcagagctg tcgtccaagt gcccatcgga gtccagttag 180
gaagaacaag tgtcatcgat ggaagaagaa gacgttaggat tgatgtcgac tgtcattgat 240
aagacttagt atttgtcgtc gcaagttaca gtggatcctg atgcggatat tacgggcttc 300
tttgacctac tggatgaaga aacttctggg tgtagaataa taagagtcaa ctttcatttg 360
t 361

<210> 4640
<211> 445
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-G3

<400> 4640

ggtcgacgca cgcgtccggg aagcacctga cgaaaaggaa tgcttgaaga tatataattgt 60
tacaacggag ctcgcccgt cattgtggag aggcaagtt gatggtcagc tagttcttgt 120
aaaaggtcct tatttagtca ggtccattga gctaaaaac ggggacctag tcattcgccg 180
tgacgtggat agggacagcg atattacaat atataccaaa gtactttca atcgggctcg 240
attcaatgtat gaaattttaa ggcttcaag aactgggtgt gaaggtctta tggcacgcgt 300
gcaaggacct ccaaaagtct cactgccccca actgaacaag tggaggttca aaatgggttc 360
acctgaaaga ttcccagact ttgatgacac tcgctgggtg attgcagaca agtataactac 420
caacagtatt acgcctccaa tcacg 445

<210> 4641
<211> 141
<212> DNA
<213> Cyanidium caldarium